```
=> d his ful

     (FILE 'HOME' ENTERED AT 11:22:53 ON 13 OCT 2005)

     FILE 'HCAPLUS' ENTERED AT 11:22:58 ON 13 OCT 2005
                E US2004-786400/APPS
L1            1 SEA ABB=ON  PLU=ON  US2004-786400/AP
                SEL RN

     FILE 'REGISTRY' ENTERED AT 11:23:23 ON 13 OCT 2005
L2           46 SEA ABB=ON  PLU=ON  (10191-60-3/BI OR 103-71-9/BI OR 13623-94-4
                /BI OR 145013-05-4/BI OR 1795-48-8/BI OR 214358-62-0/BI OR
                2260-00-6/BI OR 24544-04-5/BI OR 2986-25-6/BI OR 298680-25-8/BI
                 OR 298680-26-9/BI OR 298680-27-0/BI OR 298680-28-1/BI OR
                298680-29-2/BI OR 298680-30-5/BI OR 298680-31-6/BI OR 298680-32
                -7/BI OR 298680-33-8/BI OR 298680-34-9/BI OR 298680-35-0/BI OR
                298680-36-1/BI OR 298680-37-2/BI OR 298680-38-3/BI OR 298680-39
                -4/BI OR 298680-40-7/BI OR 298680-41-8/BI OR 298680-42-9/BI OR
                298680-43-0/BI OR 298680-44-1/BI OR 298680-45-2/BI OR 298680-46
                -3/BI OR 298680-47-4/BI OR 298680-48-5/BI OR 298680-49-6/BI OR
                298680-50-9/BI OR 3173-53-3/BI OR 5394-18-3/BI OR 574-98-1/BI
                OR 61832-41-5/BI OR 62-56-6/BI OR 75-31-0/BI OR 75535-96-5/BI
                OR 76536-66-8/BI OR 88-05-1/BI OR 9036-21-9/BI OR 95-53-4/BI)
L3           29 SEA ABB=ON  PLU=ON  L2 AND NCNC3/ESS

     FILE 'HCAPLUS' ENTERED AT 11:24:11 ON 13 OCT 2005
L4            1 SEA ABB=ON  PLU=ON  L1 AND L3
                D IALL HITSTR

     FILE 'REGISTRY' ENTERED AT 11:26:21 ON 13 OCT 2005
L5              STR
L6            0 SEA SSS SAM L5
                D QUE
L7            0 SEA SSS SAM L5
L8           14 SEA SSS FUL L5

     FILE 'HCAPLUS' ENTERED AT 11:32:39 ON 13 OCT 2005
L9            2 SEA ABB=ON  PLU=ON  L8

     FILE 'MEDLINE, EMBASE, BIOSIS, USPATFULL, USPAT2' ENTERED AT 11:33:04 ON
     13 OCT 2005
L10           5 SEA ABB=ON  PLU=ON  L8

     FILE 'HCAPLUS, USPATFULL, USPAT2' ENTERED AT 11:33:23 ON 13 OCT 2005
L11           6 DUP REM L9 L10 (1 DUPLICATE REMOVED)
                       ANSWERS '1-2' FROM FILE HCAPLUS
                       ANSWERS '3-6' FROM FILE USPATFULL

     FILE 'BEILSTEIN' ENTERED AT 11:34:32 ON 13 OCT 2005
L12           0 SEA SSS FUL L5

     FILE 'MARPAT' ENTERED AT 11:35:20 ON 13 OCT 2005
L13           0 SEA SSS SAM L5
L14           1 SEA SSS FUL L5
L15           0 SEA ABB=ON  PLU=ON  L14 NOT L9


     FILE HOME
```

FILE HCAPLUS

FILE COVERS 1907 - 13 Oct 2005 VOL 143 ISS 16
FILE LAST UPDATED: 12 Oct 2005 (20051012/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 OCT 2005 HIGHEST RN 865114-63-2
DICTIONARY FILE UPDATES: 12 OCT 2005 HIGHEST RN 865114-63-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

****
* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
****

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE MEDLINE
FILE LAST UPDATED: 12 OCT 2005 (20051012/UP). FILE COVERS 1950 TO DATE.

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP

RLOAD at an arrow promt (=>). See also:

http://www.nlm.nih.gov/mesh/
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE EMBASE
FILE COVERS 1974 TO 6 Oct 2005 (20051006/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 12 October 2005 (20051012/ED)

FILE RELOADED: 19 October 2003.

FILE USPATFULL
FILE COVERS 1971 TO PATENT PUBLICATION DATE: 11 Oct 2005 (20051011/PD)
FILE LAST UPDATED: 11 Oct 2005 (20051011/ED)
HIGHEST GRANTED PATENT NUMBER: US6954941
HIGHEST APPLICATION PUBLICATION NUMBER: US2005223461
CA INDEXING IS CURRENT THROUGH 11 Oct 2005 (20051011/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 11 Oct 2005 (20051011/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2005

>>> USPAT2 is now available. USPATFULL contains full text of the <<<
>>> original, i.e., the earliest published granted patents or <<<
>>> applications. USPAT2 contains full text of the latest US <<<
>>> publications, starting in 2001, for the inventions covered in <<<
>>> USPATFULL. A USPATFULL record contains not only the original <<<
>>> published document but also a list of any subsequent <<<
>>> publications. The publication number, patent kind code, and <<<
>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<

>>> USPATFULL and USPAT2 can be accessed and searched together <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
>>> <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE USPAT2

FILE COVERS 2001 TO PUBLICATION DATE: 13 Oct 2005 (20051013/PD)
FILE LAST UPDATED: 13 Oct 2005 (20051013/ED)
HIGHEST GRANTED PATENT NUMBER: US2005054189
HIGHEST APPLICATION PUBLICATION NUMBER: US2005229256
CA INDEXING IS CURRENT THROUGH 13 Oct 2005 (20051013/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 13 Oct 2005 (20051013/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2005

USPAT2 is a companion file to USPATFULL. USPAT2 contains full text of the latest US publications, starting in 2001, for the inventions covered in USPATFULL. USPATFULL contains full text of the original published US patents from 1971 to date and the original applications from 2001. In addition, a USPATFULL record for an invention contains a complete list of publications that may be searched in standard search fields, e.g., /PN, /PK, etc.

USPATFULL and USPAT2 can be accessed and searched together through the new cluster USPATALL. Type FILE USPATALL to enter this cluster.

Use USPATALL when searching terms such as patent assignees, classifications, or claims, that may potentially change from the earliest to the latest publication.

FILE BEILSTEIN
FILE LAST UPDATED ON OCTOBER 10, 2005

FILE COVERS 1771 TO 2005.
FILE CONTAINS 9,363,954 SUBSTANCES

>>>PLEASE NOTE: Reaction Data and substance data are stored in separate documents and can not be searched together in one query. Reaction data for BEILSTEIN compounds may be displayed immediately with the display codes PRE (preparations) and REA (reactions). A substance answer set retrieved after the search for a chemical name, a compounds with available reaction information by combining with PRE/FA, REA/FA or more generally with RX/FA. The BEILSTEIN Registry Number (BRN) is the link between a BEILSTEIN compound and belonging reactions. For mo detailed reaction searches BRNs can be searched as reaction partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

****
* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST. *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE *
* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS. *
* FOR PRICE INFORMATION SEE HELP COST *
****

NEW
*** PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE**

SEARCHED, SELECTED AND TRANSFERRED.
*** NEW DISPLAY FORMATS ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES, ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A COMPOUND AT A GLANCE.**

FILE MARPAT
FILE CONTENT: 1988-PRESENT (VOL 143 ISS 15)(20051007/ED)

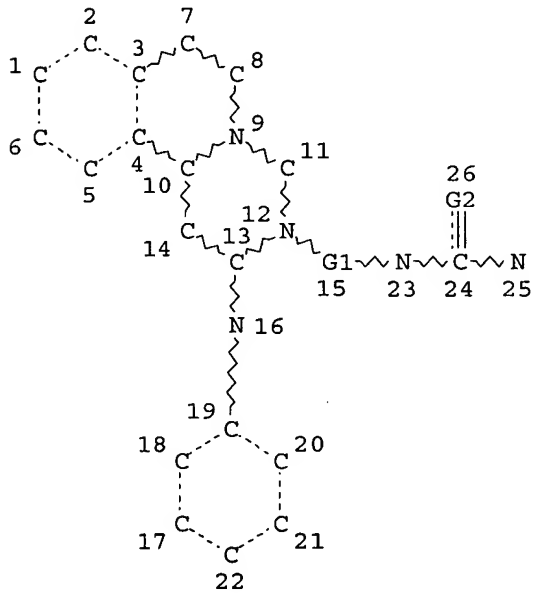
MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6916824 12 JUL 2005
DE 10359831 14 JUL 2005
EP 1550665 06 JUL 2005
JP 2005183717 07 JUL 2005
WO 2005079855 01 SEP 2005

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

=> d que stat l11
L5 STR



REP G1=(1-5) C
VAR G2=O/27/29/NH/31
NODE ATTRIBUTES:
CONNECT IS E3 RC AT 13
CONNECT IS E2 RC AT 16
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 32

STEREO ATTRIBUTES: NONE

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L8            14 SEA FILE=REGISTRY SSS FUL L5
L9             2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8
L10            5 SEA L8
L11            6 DUP REM L9 L10 (1 DUPLICATE REMOVED)

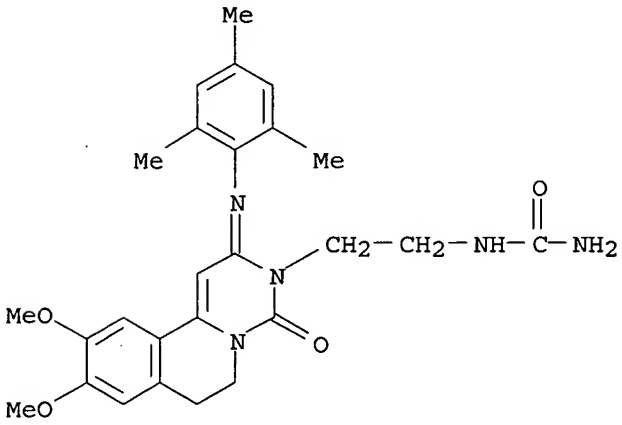

=> d l11 ibib abs hitstr 1-6
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, USPATFULL' - CONTINUE? (Y)/N:y


L11  ANSWER 1 OF 6  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2003:1006815  HCAPLUS
DOCUMENT NUMBER:          140:35974
TITLE:                    Treatment for depression and anxiety by the
                          combination of a PDE IV inhibitor and an
                          antidepressant or an anxiolytic agent
INVENTOR(S):              Sobolov-Jaynes, Susan Beth; Schmidt, Christopher
                          Joseph
PATENT ASSIGNEE(S):       Pfizer Products Inc., USA
SOURCE:                   PCT Int. Appl., 62 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 2003105902         A1    20031224    WO 2003-IB2295          20030605
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2003235631         A1    20031225    US 2003-387060          20030312
     CA 2488138            AA    20031224    CA 2003-2488138         20030605
     EP 1517707            A1    20050330    EP 2003-727833          20030605
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     BR 2003011903         A     20050607    BR 2003-11903           20030605
PRIORITY APPLN. INFO.:                       US 2002-389181P      P  20020617
                                             WO 2003-IB2295       W  20030605

OTHER SOURCE(S):          MARPAT 140:35974
AB   The present invention relates to a method of treating depression or
     anxiety in a mammal, including a human, by administering to the mammal a
     PDE IV inhibitor in combination with an antidepressant or an anxiolytic
     agent.  It also relates to pharmaceutical compns. containing a
     pharmaceutically acceptable carrier, a PDE IV inhibitor and an anxiolytic
     agent or antidepressant.
IT   298680-25-8
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (treatment for depression and anxiety by combination of a PDE IV
```

inhibitor and an antidepressant or an anxiolytic agent)
RN 298680-25-8 HCAPLUS
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:707163 HCAPLUS
DOCUMENT NUMBER: 133:266869
TITLE: Preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors.
INVENTOR(S): Oxford, Alexander William; Jack, David
PATENT ASSIGNEE(S): Vanguard Medica Ltd., UK
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

applicant is

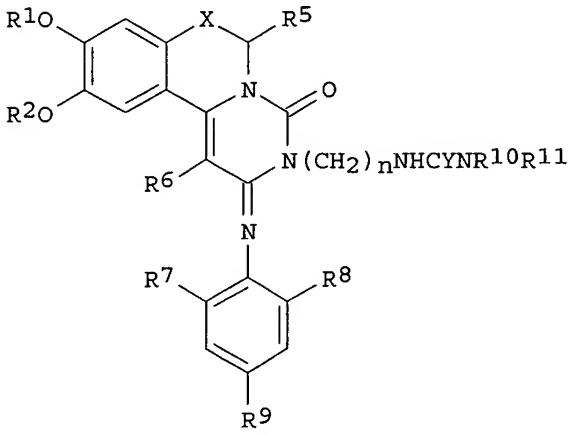
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000058308	A1	20001005	WO 2000-GB1193	20000329
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
NZ 514158	A	20000329	NZ 2000-514158	20000329
CA 2368413	AA	20001005	CA 2000-2368413	20000329
AU 2000041274	A5	20001016	AU 2000-41274	20000329
AU 773504	B2	20040527		
EP 1165558	A1	20020102	EP 2000-920857	20000329
EP 1165558	B1	20030924		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

BR 2000009446	A	20020115	BR 2000-9446		20000329
JP 2002540207	T2	20021126	JP 2000-608010		20000329
AT 250602	E	20031015	AT 2000-920857		20000329
PT 1165558	T	20040227	PT 2000-920857		20000329
ES 2208310	T3	20040616	ES 2000-920857		20000329
US 2003036542	A1	20030220	US 2001-964260		20010926
US 6794391	B2	20040921			
NO 2001004728	A	20011123	NO 2001-4728		20010928
US 2004171828	A1	20040902	US 2004-786650		20040224
US 2004176353	A1	20040909	US 2004-786400		20040224
PRIORITY APPLN. INFO.:			GB 1999-7454	A	19990331
			GB 1999-9802	A	19990428
			WO 2000-GB1193	W	20000329
			US 2001-964260	A3	20010926

OTHER SOURCE(S): MARPAT 133:266869

GI



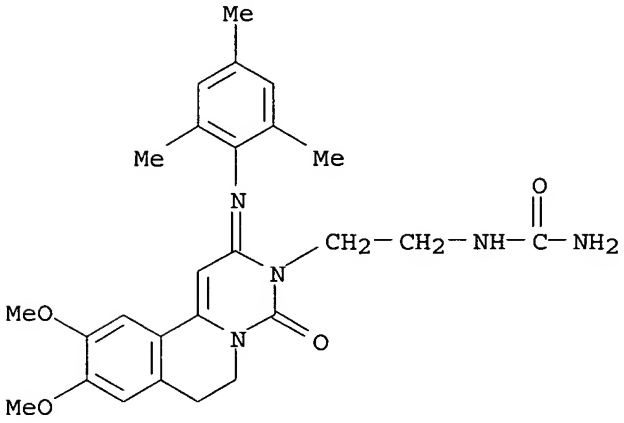
I

AB Title compds. [I; R1, R2 = alkyl, acyl; R5 = H, alkyl, alkenyl, alkynyl; R6 = H, alkyl, alkenyl, alkynyl, amino, alkylamino, dialkylamino, acylamino; R7, R8 = H, halo, OH, CF3, alkyl, alkenyl, alkynyl, acyl, alkythio, alkoxy, cycloalkyl; R9 = H, halo, OH, CF3, alkyl, alkenyl, alkynyl, acyl, alkythio, alkoxy, cycloalkyl; X = OCH2, CR3R4; R3, R4 = H, alkyl; R10, R11 = H, alkyl, cycloalkyl, Ph; Y = O, CHNO2, NCN, NH, NNO2; n = 2-4], were prepared I have a longer duration of action than the known compound trequinsin (9,10-dimethoxy-3-methyl-2-mesitylimino-2,3,6,7-tetrahydro-4H--pyrimido[6,1-a]isoquinolin-4-one) and do not have trequinsin's very bitter taste. Thus, Na cyanate was added dropwise to 9,10-dimethoxy-2-(2,4,6-trimethylphenylimino)-3-(2-aminoethyl)-3,4,6,7-tetrahydro-2H-pyrimido[6,1-a]isoquinolin-4-one (preparation given) in aqueous HCl at 80° followed by stirring for 2 h to give 54% 9,10-dimethoxy-2-(2,4,6-trimethylphenylimino)-3-(N-carbamoyl-2-aminoethyl)-3,4,6,7-tetrahydro-2H-pyrimido[6,1-a]isoquinolin-4-one(II). II inhibited PDE3 with IC50 = 0.46 μM and was tasteless.

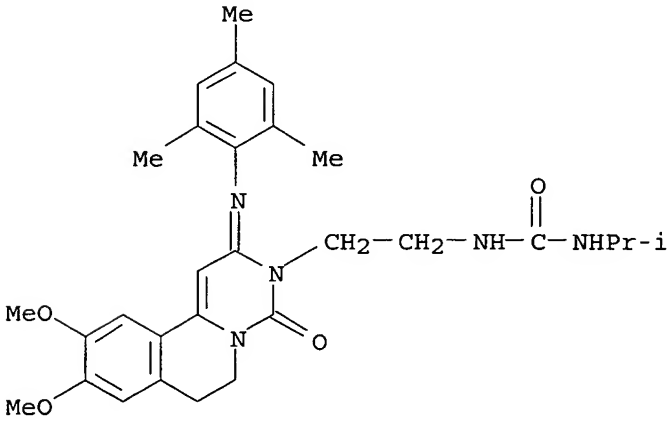
IT **298680-25-8P 298680-26-9P 298680-27-0P**
298680-28-1P 298680-29-2P 298680-30-5P

298680-31-6P 298680-32-7P 298680-33-8P
298680-34-9P 298680-35-0P 298680-36-1P
298680-37-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)

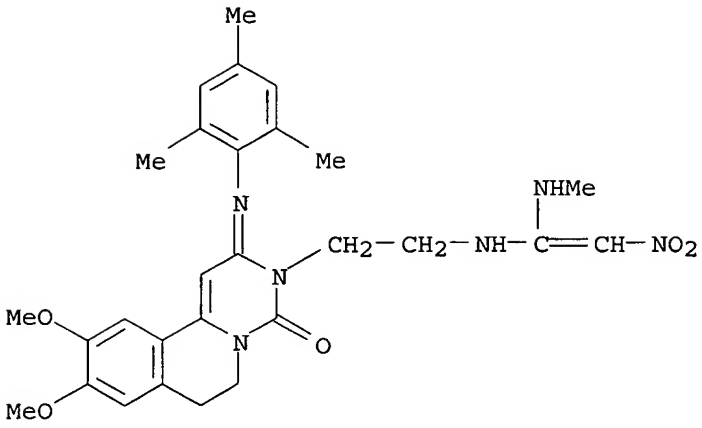
RN 298680-25-8 HCAPLUS
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



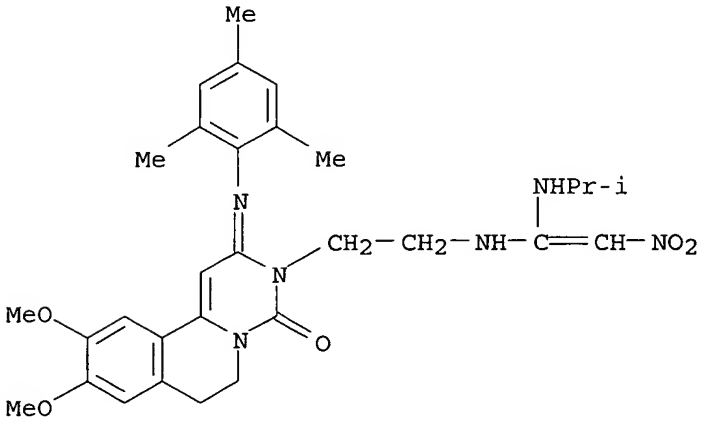
RN 298680-26-9 HCAPLUS
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-(1-methylethyl)- (9CI) (CA INDEX NAME)



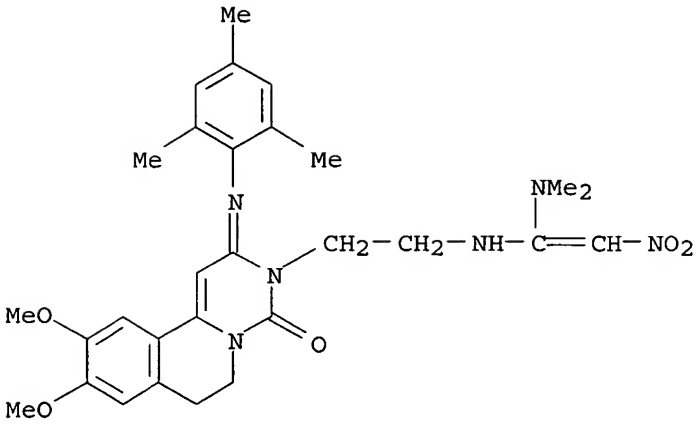
RN 298680-27-0 HCAPLUS
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-(methylamino)-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



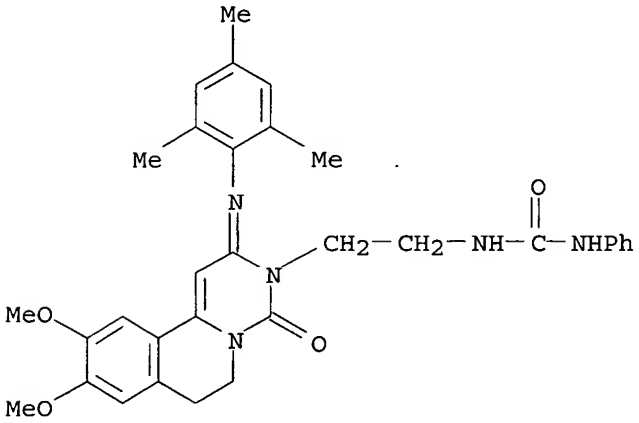
RN 298680-28-1 HCAPLUS
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-[(1-methylethyl)amino]-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



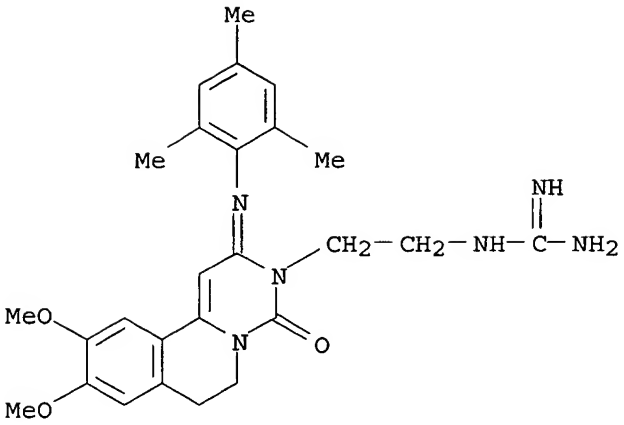
RN 298680-29-2 HCAPLUS
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 3-[2-[[1-(dimethylamino)-2-nitroethenyl]amino]ethyl]-2,3,6,7-tetrahydro-9,10-dimethoxy-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



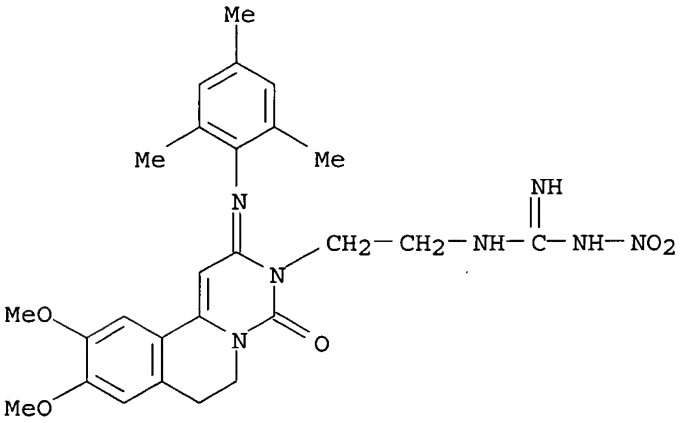
RN 298680-30-5 HCAPLUS
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)



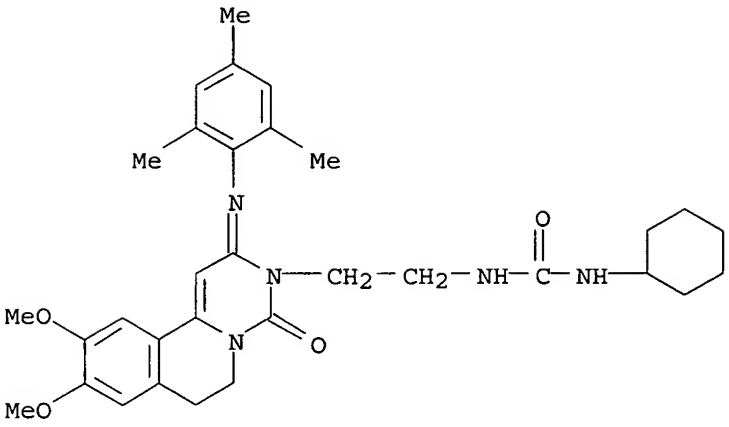
RN 298680-31-6 HCAPLUS
CN Guanidine, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



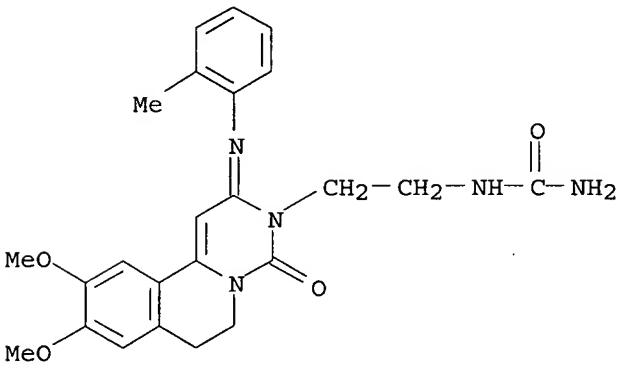
RN 298680-32-7 HCAPLUS
CN Guanidine, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-nitro- (9CI) (CA INDEX NAME)



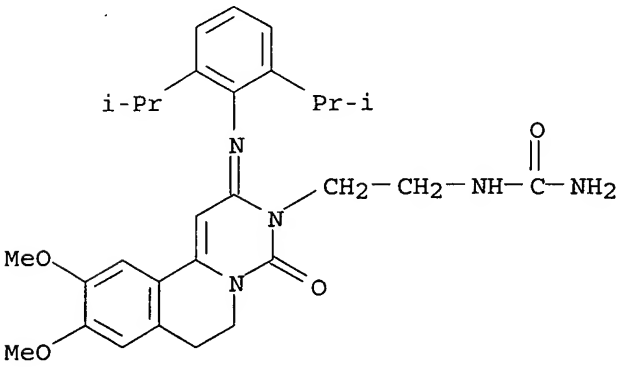
RN 298680-33-8 HCAPLUS
CN Urea, N-cyclohexyl-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



RN 298680-34-9 HCAPLUS
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-2-[(2-methylphenyl)imino]-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)

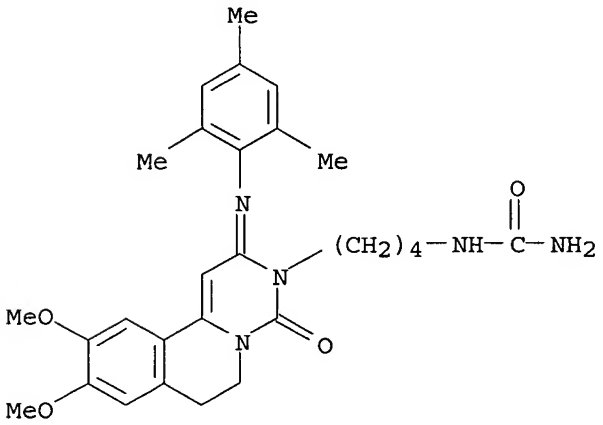


RN 298680-35-0 HCAPLUS
CN Urea, [2-[2-[[2,6-bis(1-methylethyl)phenyl]imino]-6,7-dihydro-9,10-dimethoxy-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)

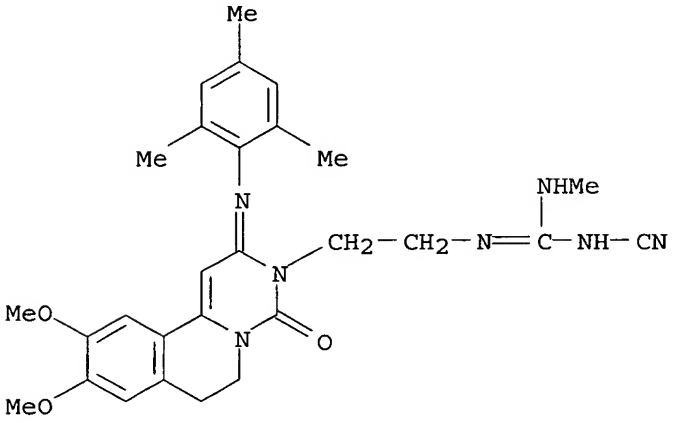


RN 298680-36-1 HCAPLUS

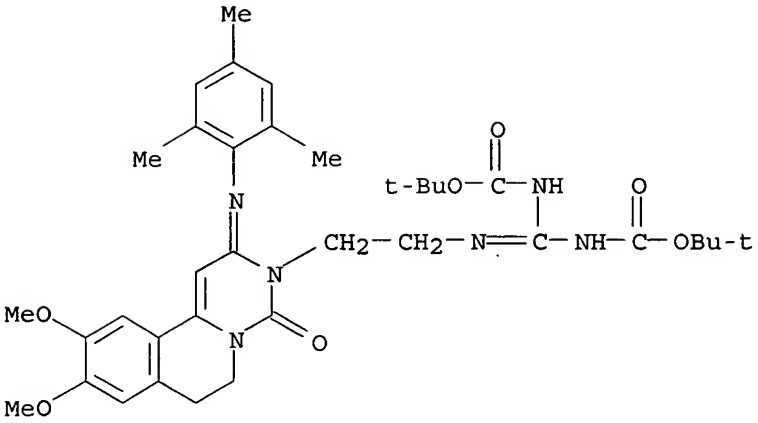
CN Urea, [4-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]butyl]- (9CI) (CA INDEX NAME)



RN 298680-37-2 HCAPLUS
CN Guanidine, N-cyano-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N''-methyl- (9CI) (CA INDEX NAME)



IT **298680-40-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)
RN 298680-40-7 HCAPLUS
CN Carbamic acid, [[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]carbonimidoyl]bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 6 USPATFULL on STN DUPLICATE 1

ACCESSION NUMBER:	2003:51584 USPATFULL		
TITLE:	Derivatives of pyrimido[6.1-a]isoquinolin-4-one		
INVENTOR(S):	Oxford, Alexander William, Royston, UNITED KINGDOM		
	Jack, David, Wheathampstead, UNITED KINGDOM		

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003036542	A1	20030220
	US 6794391	B2	20040921
APPLICATION INFO.:	US 2001-964260	A1	20010926 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1999-7454	19990331
	GB 1999-9802	19990428

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Dike, Bronstein, Roberts & Cushman, Intellectual Property Patent Practice, EDWARDS & ANGELL, LLP, P.O. Box 9169, Boston, MA, 02209
NUMBER OF CLAIMS:	50
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	5 Drawing Page(s)
LINE COUNT:	1581

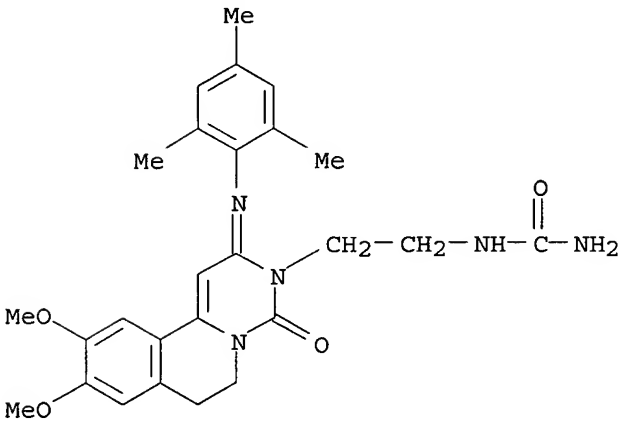
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides compounds or salts thereof of the general formula (I): ##STR1##

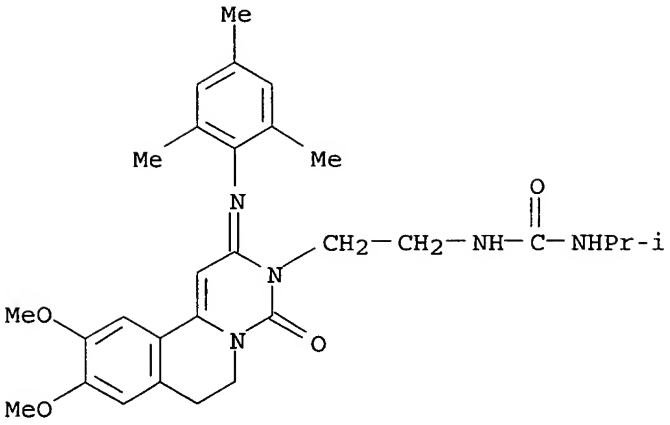
wherein each of R.sup.1 and RX independently represents a C.sub.1-6 alkyl or C.sub.2-7 acyl group; X represents OCH.sub.2 or a group CR.sup.3R.sup.4; wherein each of R.sup.3 or R.sup.4 independently represents a hydrogen atom or a C.sub.1-3 alkyl group; R.sup.5 represents a hydrogen atom or a C.sub.1-3 alkyl, C.sub.2-3 alkenyl or C.sub.2-3 alkynyl group; R.sup.6 represents a hydrogen atom or a C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, amino, C.sub.1-6alkylamino, di(C.sub.1-6) alkylamino or C.sub.2-7 acylamino group; each of R.sup.7 and R.sup.8 independently represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C.sub.1-6 alkyl,

C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, C.sub.2-7 acyl, C.sub.1-6 alkylthio, C.sub.1-6 alkoxy, C.sub.3-6 cycloalkyl; and R.sup.9 represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, C.sub.2-7 acyl, C.sub.1-6 alkylthio, C.sub.1-6 alkoxy or C.sub.3-6 cycloalkyl group. The compounds or salts thereof are useful for treatment of respiratory disorders such as asthma. Compounds of the invention have a longer duration of action than the known compound trequinsin (9,10-dimethoxy-3 methyl-2-mesitylimino-2,3,6,7-tetrahydro-.sub.4-H-pyrimido[6,1-a]isoquinolin-4-one).

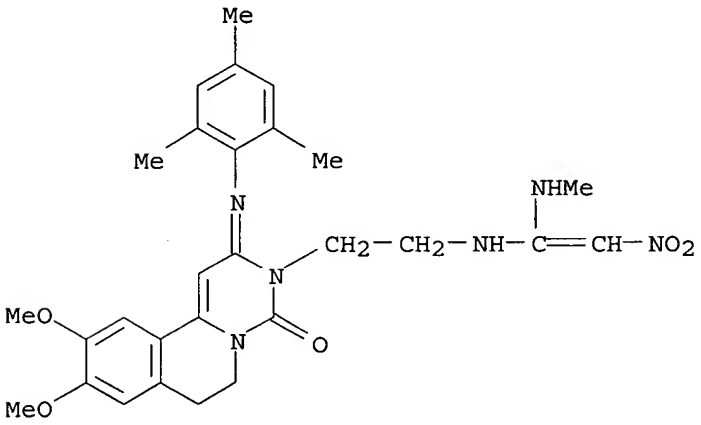
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **298680-25-8P 298680-26-9P 298680-27-0P**
298680-28-1P 298680-29-2P 298680-30-5P
298680-31-6P 298680-32-7P 298680-33-8P
298680-34-9P 298680-35-0P 298680-36-1P
298680-37-2P
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)
RN 298680-25-8 USPATFULL
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



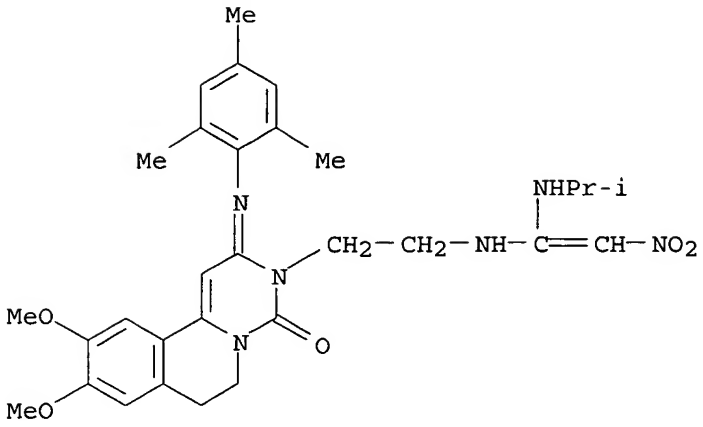
RN 298680-26-9 USPATFULL
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-(1-methylethyl)- (9CI) (CA INDEX NAME)



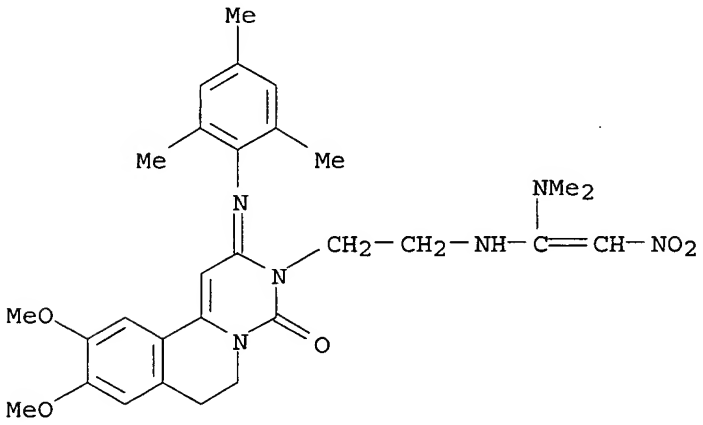
RN 298680-27-0 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-(methylamino)-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



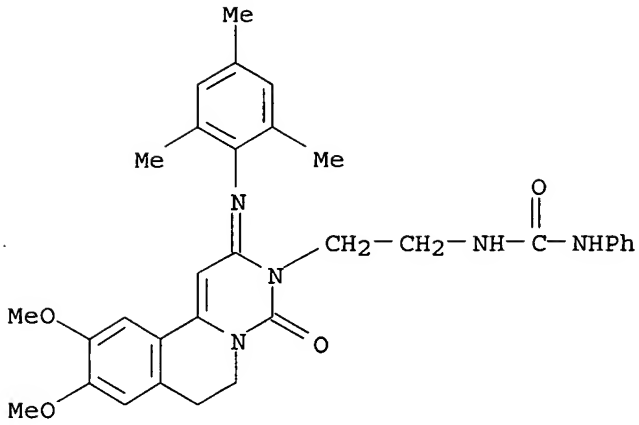
RN 298680-28-1 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-[(1-methylethyl)amino]-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



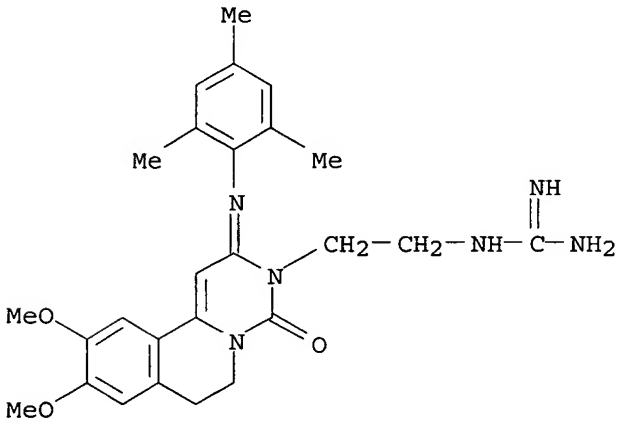
RN 298680-29-2 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 3-[2-[[1-(dimethylamino)-2-nitroethenyl]amino]ethyl]-2,3,6,7-tetrahydro-9,10-dimethoxy-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



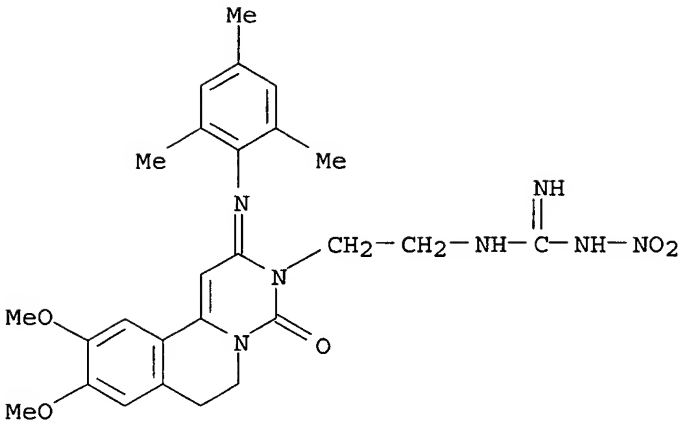
RN 298680-30-5 USPATFULL
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)



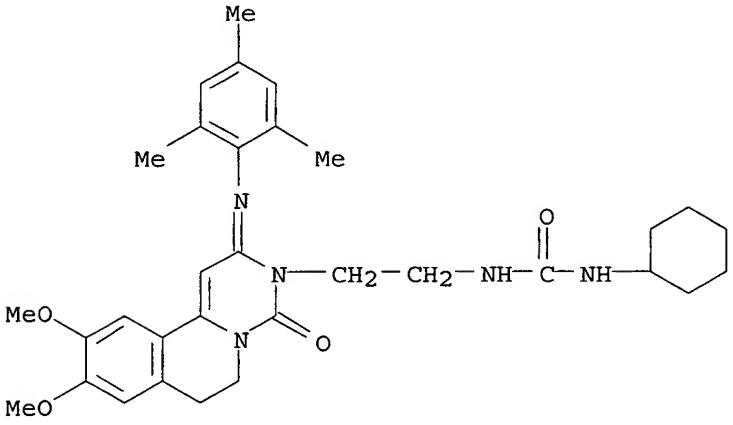
RN 298680-31-6 USPATFULL
CN Guanidine, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-(9CI) (CA INDEX NAME)



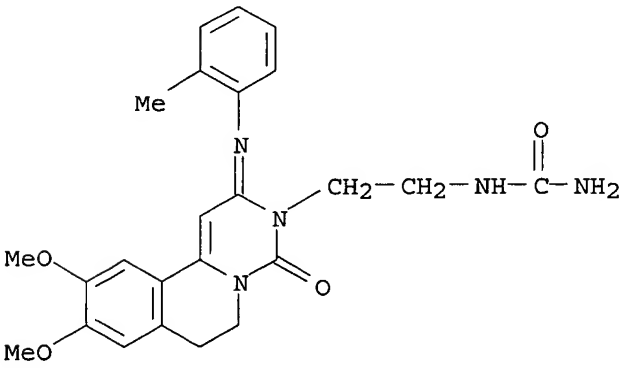
RN 298680-32-7 USPATFULL
CN Guanidine, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-nitro- (9CI) (CA INDEX NAME)



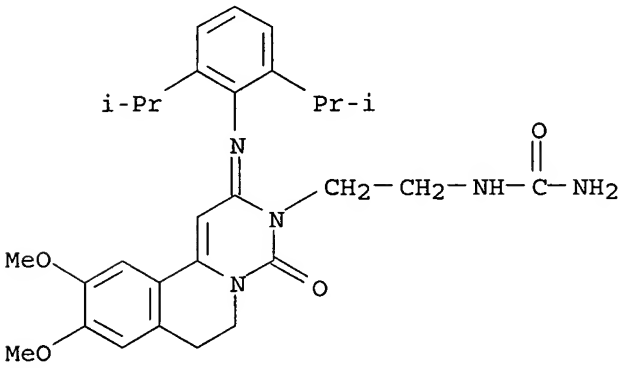
RN 298680-33-8 USPATFULL
CN Urea, N-cyclohexyl-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



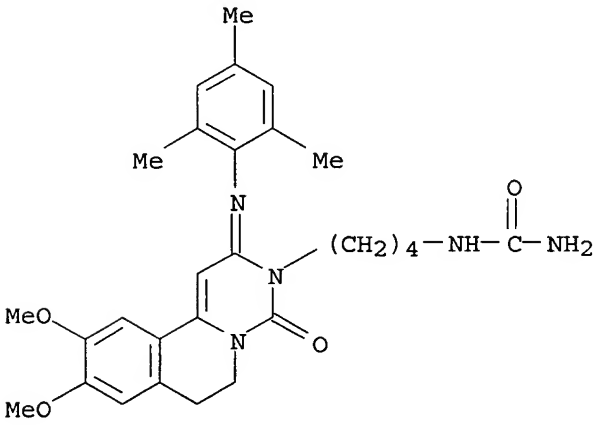
RN 298680-34-9 USPATFULL
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-2-[(2-methylphenyl)imino]-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



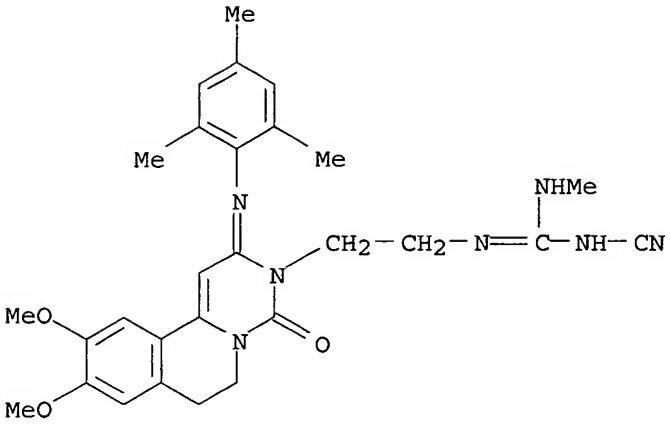
RN 298680-35-0 USPATFULL
CN Urea, [2-[2-[[2,6-bis(1-methylethyl)phenyl]imino]-6,7-dihydro-9,10-dimethoxy-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



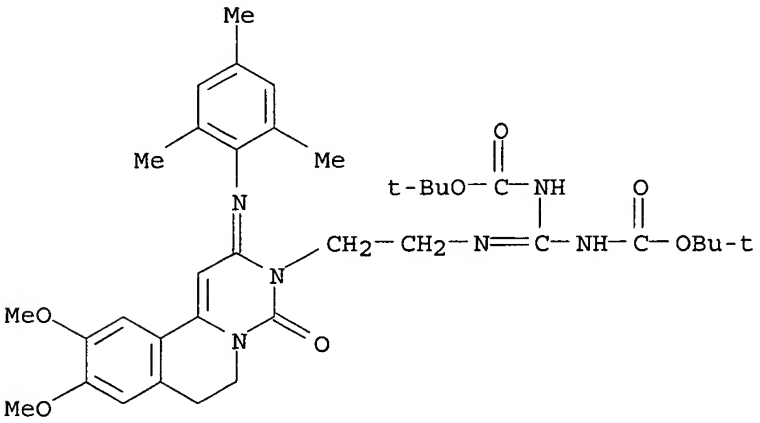
RN 298680-36-1 USPATFULL
CN Urea, [4-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]butyl]- (9CI) (CA INDEX NAME)



RN 298680-37-2 USPATFULL
CN Guanidine, N-cyano-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N''-methyl- (9CI) (CA INDEX NAME)



IT **298680-40-7P**
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)
RN 298680-40-7 USPATFULL
CN Carbamic acid, [[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]carbonimidoyl]bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



L11 ANSWER 4 OF 6 USPATFULL on STN
ACCESSION NUMBER: 2004:227967 USPATFULL
TITLE: Derivatives of pyrimido[6,1-a]isoquinolin-4-one
INVENTOR(S): Oxford, Alexander William, Royston, UNITED KINGDOM
Jack, David, Wheathampstead, UNITED KINGDOM
PATENT ASSIGNEE(S): Vernalis Limited (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004176353	A1	20040909
APPLICATION INFO.:	US 2004-786400	A1	20040224 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-964260, filed on 26 Sep 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1999-7454	19990331
	GB 1999-9802	19990428
	WO 2000-58308	20001005

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: EDWARDS & ANGELL, LLP, P.O. BOX 55874, BOSTON, MA, 02205
NUMBER OF CLAIMS: 50
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1579
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

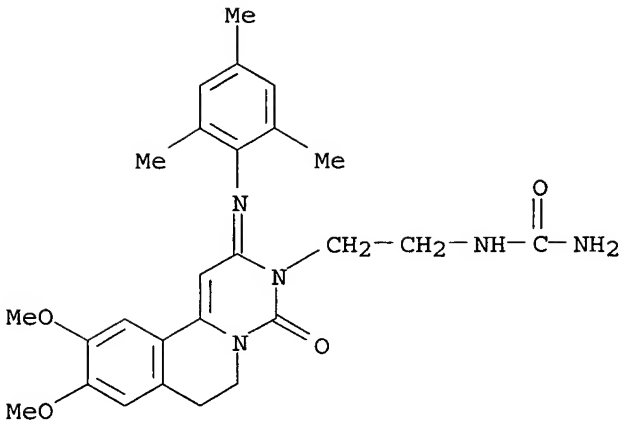
AB Compounds of general formula (I) wherein each of R.sup.1 and R.sup.2 independently represents a C.sub.1-6 alkyl or C.sub.2-7 acyl group; R.sup.5 represents a hydrogen atom or a C.sub.1-3 alkyl, C.sub.2-3 alkenyl or C.sub.2-3 alkynyl group; R.sup.6 represents a hydrogen atom or a C.sub.1-6 alkyl C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, amino, C.sub.1-6 alkylamino, di(C.sub.1-6) alkylamino or C.sub.2-7 acylamino group; each of R.sup.7 and R.sup.8 independently represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, C.sub.2-7 acyl, C.sub.1-6 alkythio, C.sub.3-6 alkoxy, C.sub.3-6 cycloalkyl; and R.sup.9 represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, C.sub.1-7 acyl, C.sub.1-6 alkythio. C.sub.1-6 alkoxy or C.sub.3-6 cycloalkyl group, X represents OCH.sub.2.sup.- or a group CR.sup.3R.sup.4, wherein each of R.sup.3 and R.sup.4 independently represents a hydrogen atom or a C.sub.1-3 alkyl group; each of R.sup.10 and R.sup.11 independently represents a hydrogen atom, a C.sub.1-3 alkyl C.sub.3-6 cycloalkyl or phenyl group; y represents an oxygen atom or a group CHNO.sub.2, NCN, NH or NNO.sub.2, n is an integer from 2 to 4; or a salt thereof; arm useful for treatment of respiratory disorders such as asthma. Compounds of the invention have a longer duration of action than the known compound trequinsin (9,10-dimethoxy-3-methyl-2-mesitylimino-2,3,6,7-tetrahydro-4H-pyrimido [6,1-a]isoquinolin-4-one) and do not have trequinsin's very bitter taste. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

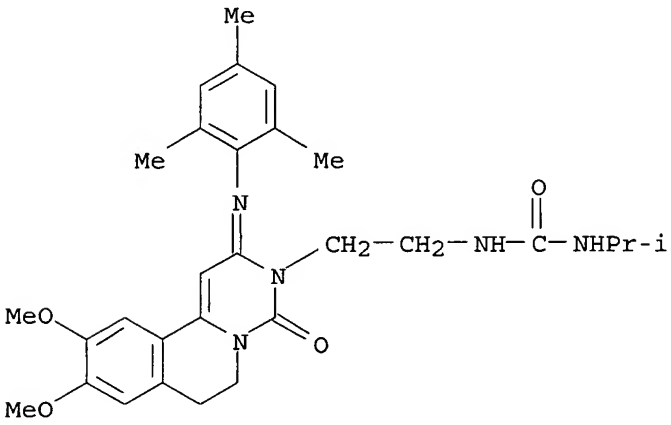
IT **298680-25-8P 298680-26-9P 298680-27-0P**
298680-28-1P 298680-29-2P 298680-30-5P
298680-31-6P 298680-32-7P 298680-33-8P
298680-34-9P 298680-35-0P 298680-36-1P
298680-37-2P
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)

RN 298680-25-8 USPATFULL

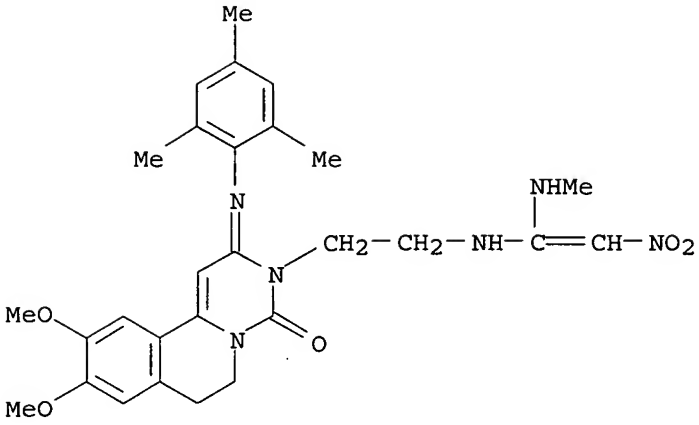
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



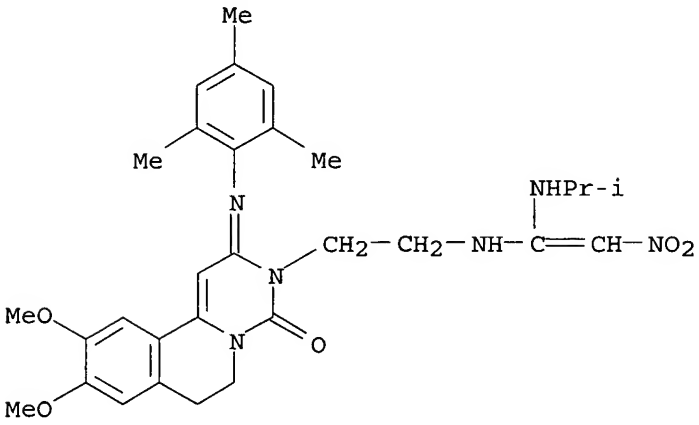
RN 298680-26-9 USPATFULL
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-(1-methylethyl)- (9CI) (CA INDEX NAME)



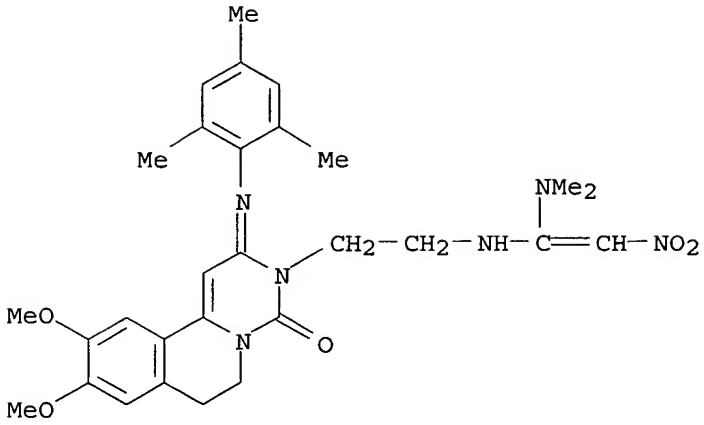
RN 298680-27-0 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-(methylamino)-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



RN 298680-28-1 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-[(1-methylethyl)amino]-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



RN 298680-29-2 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 3-[2-[[1-(dimethylamino)-2-nitroethenyl]amino]ethyl]-2,3,6,7-tetrahydro-9,10-dimethoxy-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



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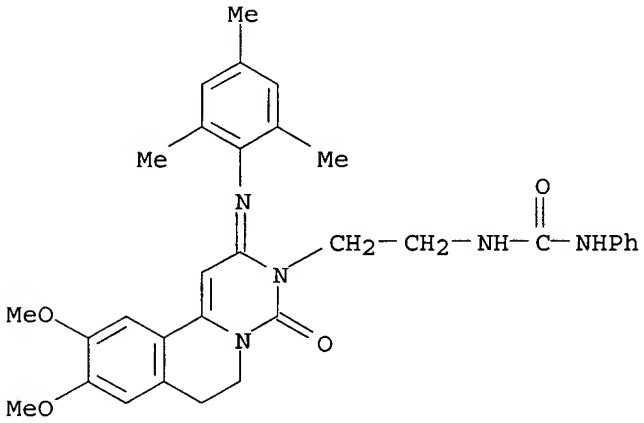
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)



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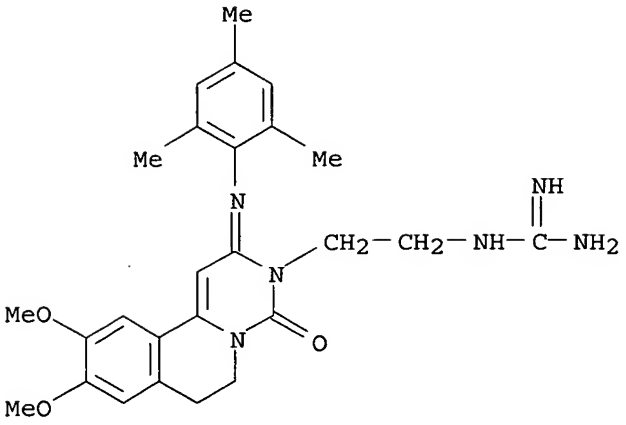
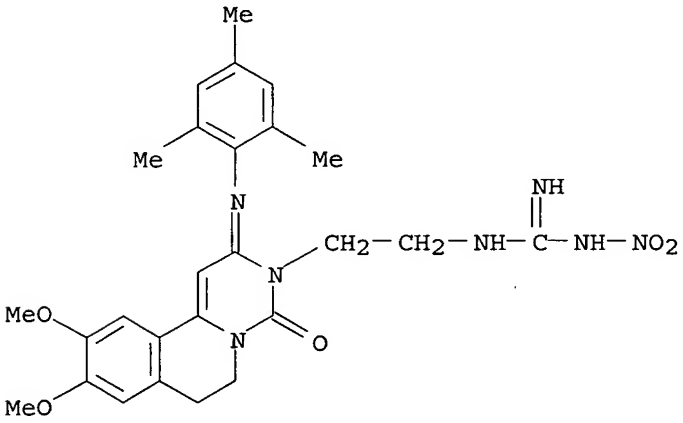
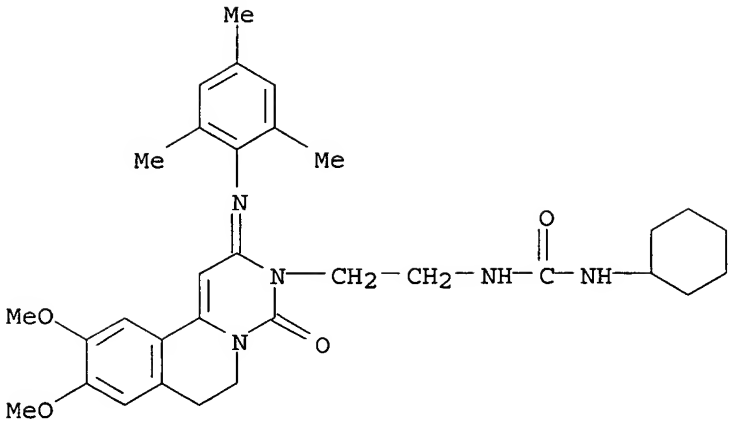
CN Guanidine, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



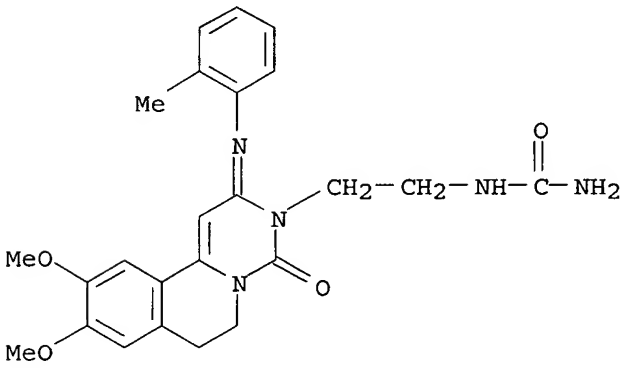
RN 298680-32-7 USPATFULL
CN Guanidine, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-nitro- (9CI) (CA INDEX NAME)



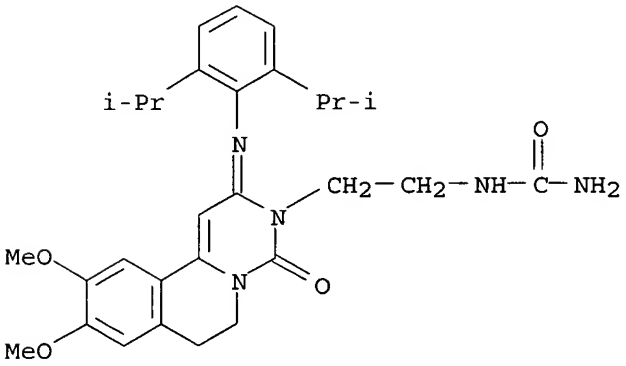
RN 298680-33-8 USPATFULL
CN Urea, N-cyclohexyl-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



RN 298680-34-9 USPATFULL
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-2-[(2-methylphenyl)imino]-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)

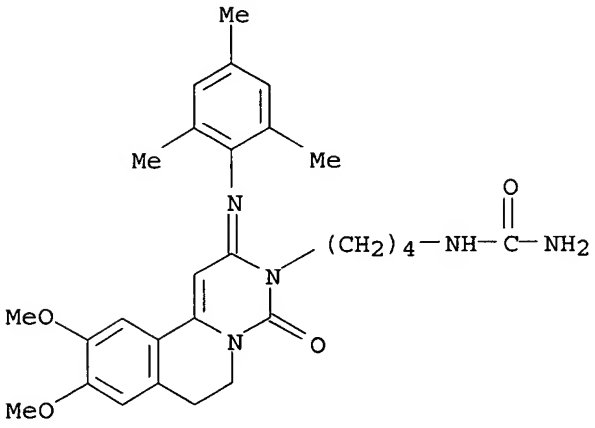


RN 298680-35-0 USPATFULL
CN Urea, [2-[2-[[2,6-bis(1-methylethyl)phenyl]imino]-6,7-dihydro-9,10-dimethoxy-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)

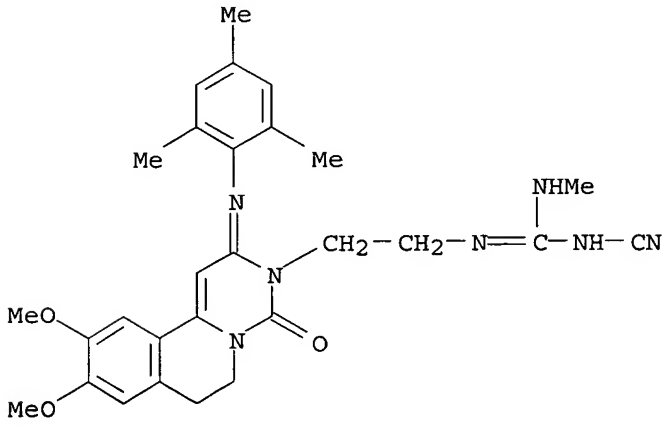


RN 298680-36-1 USPATFULL

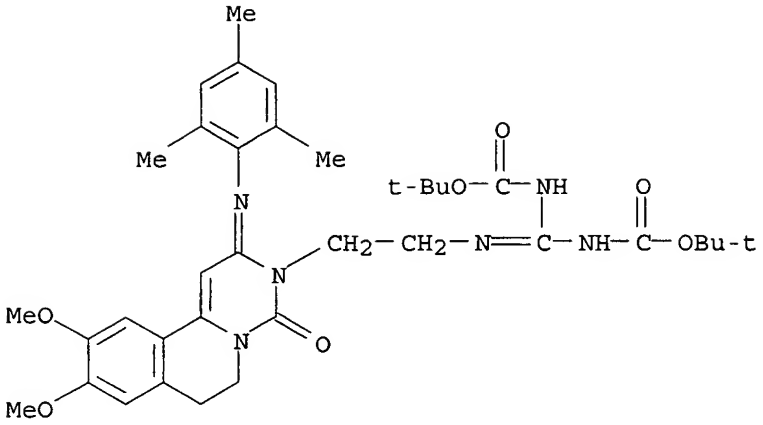
CN Urea, [4-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]butyl]-(9CI) (CA INDEX NAME)



RN 298680-37-2 USPATFULL
CN Guanidine, N-cyano-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N''-methyl- (9CI) (CA INDEX NAME)



IT **298680-40-7P**
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)
RN 298680-40-7 USPATFULL
CN Carbamic acid, [[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]carbonimidoyl]bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



L11 ANSWER 5 OF 6 USPATFULL on STN

ACCESSION NUMBER:	2004:222055 USPATFULL
TITLE:	Derivatives of pyrimido[6,1-a]isoquinolin-4-one
INVENTOR(S):	Oxford, Alexander William, Royston, UNITED KINGDOM Jack, David, Wheathampstead, UNITED KINGDOM
PATENT ASSIGNEE(S):	Vernalis Limited (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004171828	A1	20040902
APPLICATION INFO.:	US 2004-786650	A1	20040224 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-964260, filed on 26 Sep 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1999-7454	19990331
	GB 1999-9802	19990428

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Peter F. Corless, EDWARDS & ANGELL, LLP, P.O. Box 9169, Boston, MA, 02209
NUMBER OF CLAIMS:	50
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	5 Drawing Page(s)
LINE COUNT:	1565

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds of general formula (I) wherein each of R.sup.1 and R.sup.2 independently represents a C.sub.1-6 alkyl or C.sub.2-7 acyl group; R.sup.5 represents a hydrogen atom or a C.sub.1-3 alkyl, C.sub.2-3 alkenyl or C.sub.2-3 alkynyl group; R.sup.6 represents a hydrogen atom or a C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, amino, C.sub.1-6 alkylamino, di(C.sub.1-6) alkylamino or C.sub.2-7 acylamino group, each of R.sup.7 and R.sup.8 independently represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, C.sub.2-7 acyl, C.sub.1-6 alkythio, C.sub.1-6 alkoxy, C.sub.3-6 cycloalkyl; and R.sup.9 represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, C.sub.2-7 acyl, C.sub.1-6 alkythio, C.sub.1-6 alkoxy or C.sub.3-6 cycloalkyl group; X represents OCH.sub.2 or a group CR.sup.3R.sup.4, wherein each of R.sup.3 and

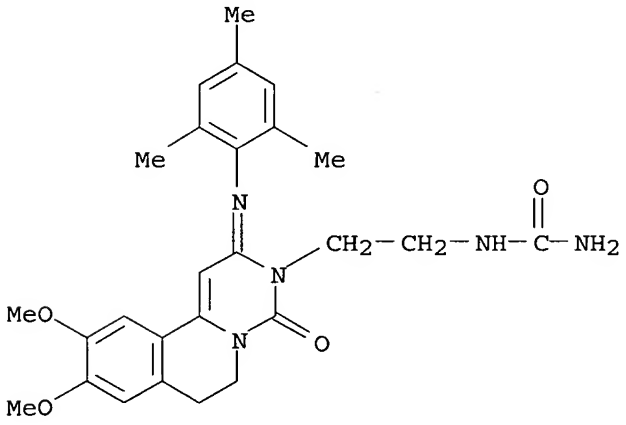
R.sup.4 independently represents a hydrogen atom or a C.sub.1-3 alkyl group; each of R.sup.10 and R.sup.11 independently represents a hydrogen atom, a C.sub.1-3 alkyl, C.sub.3-6 cycloalkyl or phenyl group; y represents an oxygen atom or a group CHNO.sub.2, NCN, NH or NNO.sub.2, n is an integer from 2 to 4; or a salt thereof; are useful for treatment of respiratory disorders such as asthma. Compounds of the invention have a longer duration of action than the known compound trequinsin (9,10-dimethoxy-3-methyl-2-mesitylimino-2,3,6,7-tetrahydro-4H-pyrimido[6,1-a]-isoquinolin-4-one) and do not have trequinsin's very bitter taste. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **298680-25-8P 298680-26-9P 298680-27-0P**
298680-28-1P 298680-29-2P 298680-30-5P
298680-31-6P 298680-32-7P 298680-33-8P
298680-34-9P 298680-35-0P 298680-36-1P
298680-37-2P
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)

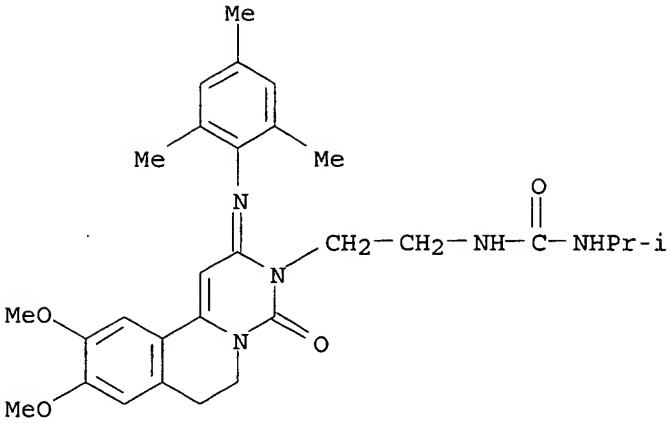
RN 298680-25-8 USPATFULL

CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)

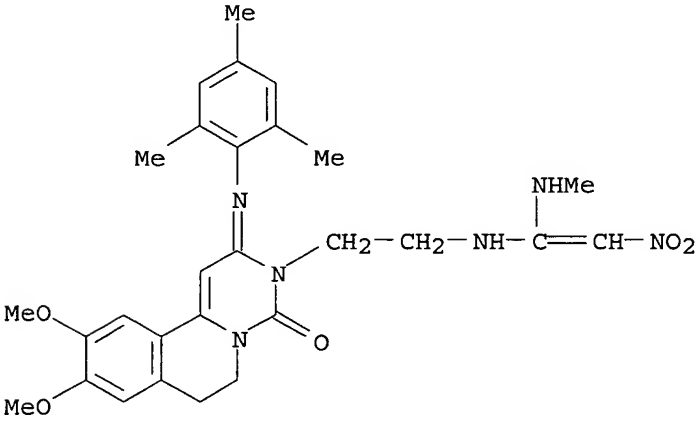


RN 298680-26-9 USPATFULL

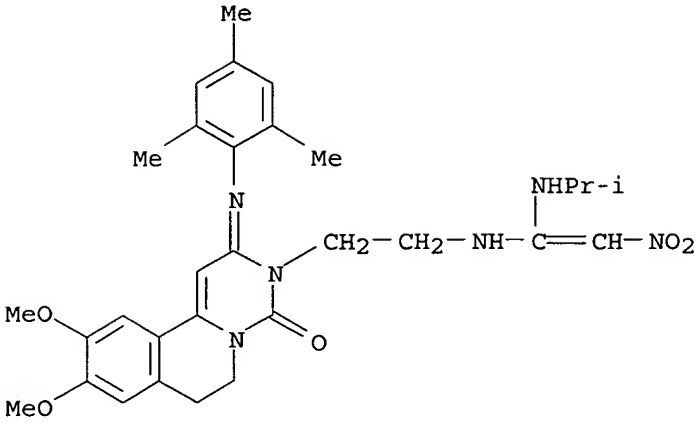
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-(1-methylethyl)- (9CI) (CA INDEX NAME)



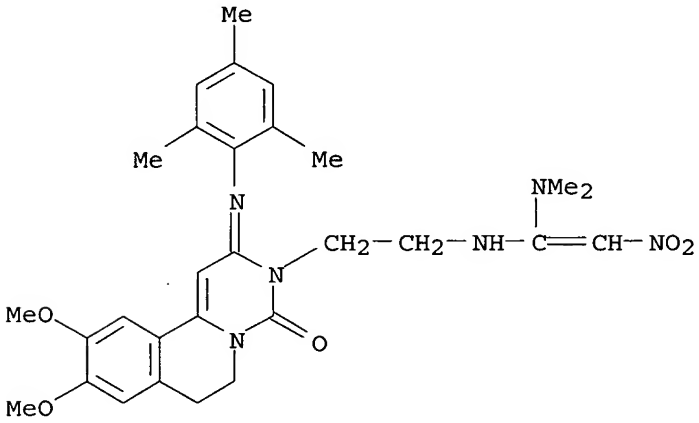
RN 298680-27-0 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-(methylamino)-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



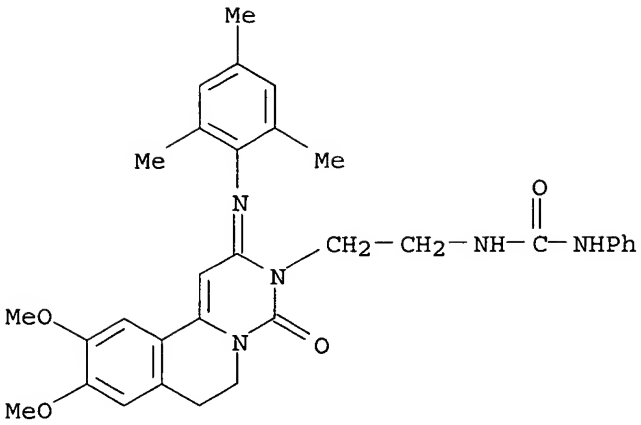
RN 298680-28-1 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-[(1-methylethyl)amino]-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



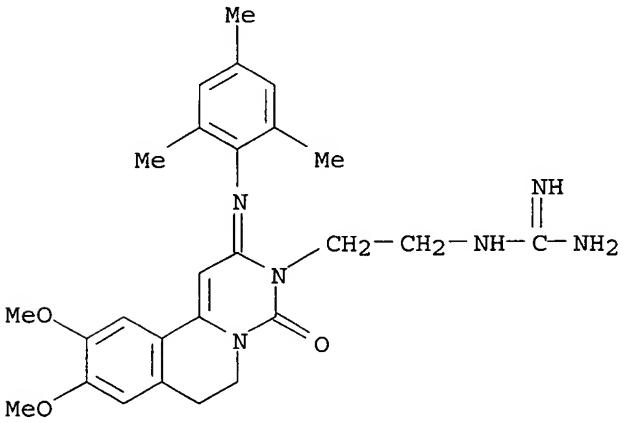
RN 298680-29-2 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 3-[2-[[1-(dimethylamino)-2-nitroethenyl]amino]ethyl]-2,3,6,7-tetrahydro-9,10-dimethoxy-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



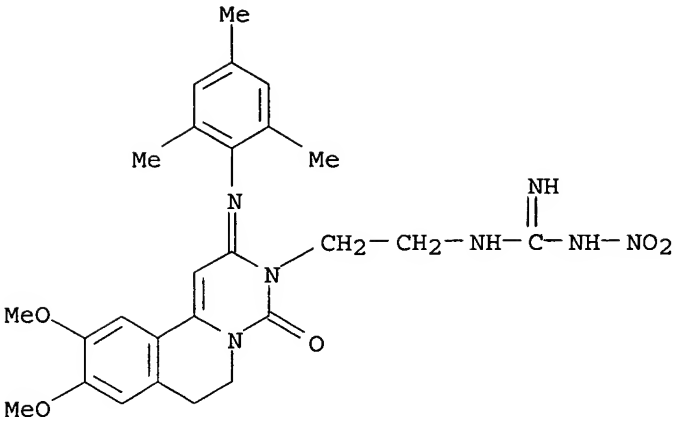
RN 298680-30-5 USPATFULL
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)



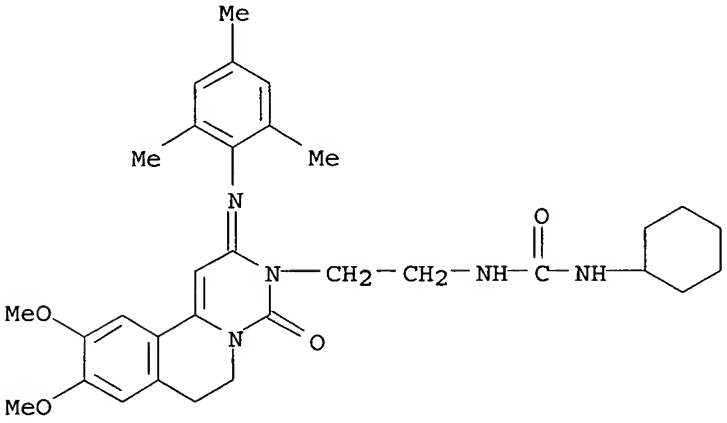
RN 298680-31-6 USPATFULL
CN Guanidine, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



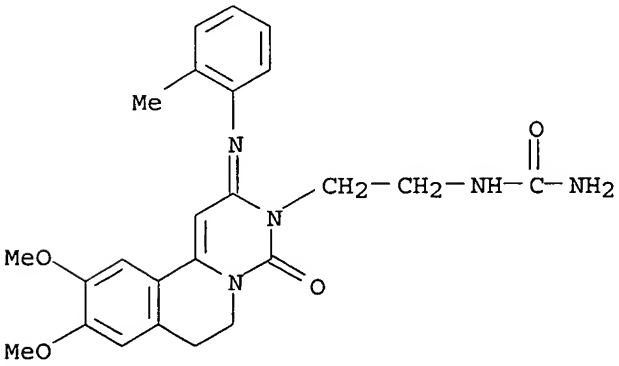
RN 298680-32-7 USPATFULL
CN Guanidine, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-nitro- (9CI) (CA INDEX NAME)



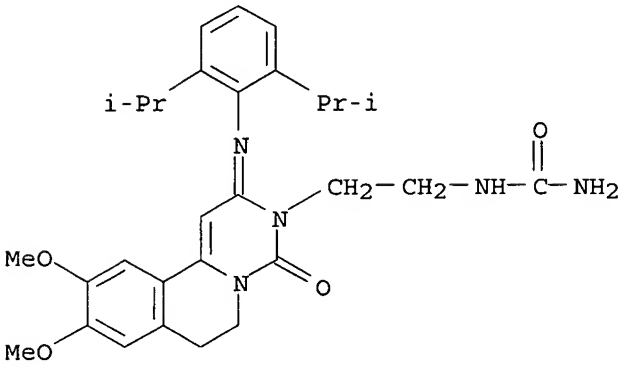
RN 298680-33-8 USPATFULL
CN Urea, N-cyclohexyl-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



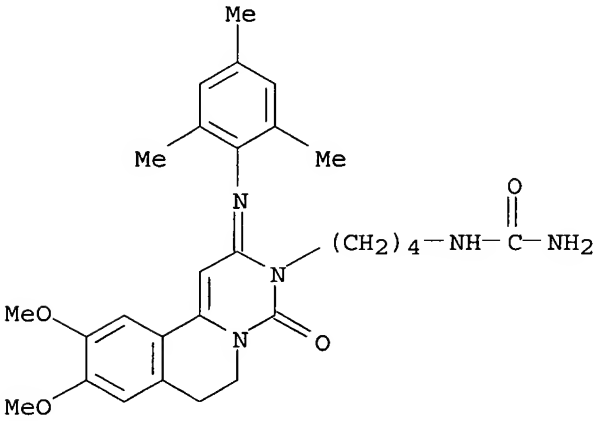
RN 298680-34-9 USPATFULL
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-2-[(2-methylphenyl)imino]-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



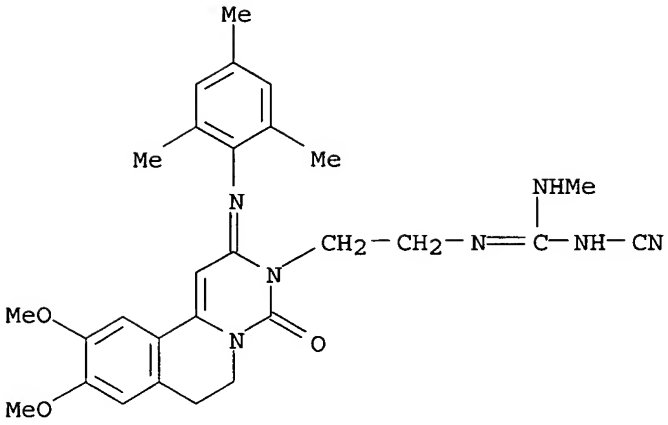
RN 298680-35-0 USPATFULL
CN Urea, [2-[2-[[2,6-bis(1-methylethyl)phenyl]imino]-6,7-dihydro-9,10-dimethoxy-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



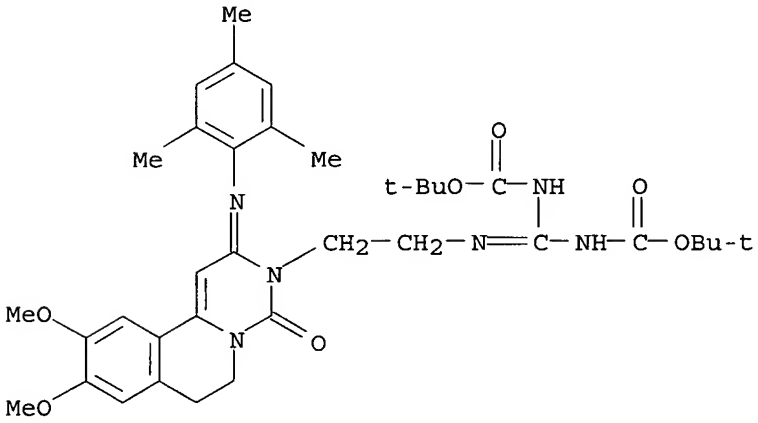
RN 298680-36-1 USPATFULL
CN Urea, [4-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]butyl]- (9CI) (CA INDEX NAME)



RN 298680-37-2 USPATFULL
CN Guanidine, N-cyano-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N''-methyl- (9CI) (CA INDEX NAME)



IT **298680-40-7P**
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)
RN 298680-40-7 USPATFULL
CN Carbamic acid, [[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]carbonimidoyl]bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



L11 ANSWER 6 OF 6 USPATFULL on STN
ACCESSION NUMBER: 2003:334755 USPATFULL
TITLE: Combination treatment for depression and anxiety
INVENTOR(S): Sobolov-Jaynes, Susan B., Ivoryton, CT, UNITED STATES
Schmidt, Christopher J., Old Lyme, CT, UNITED STATES
PATENT ASSIGNEE(S): Pfizer Inc. (U.S. corporation)

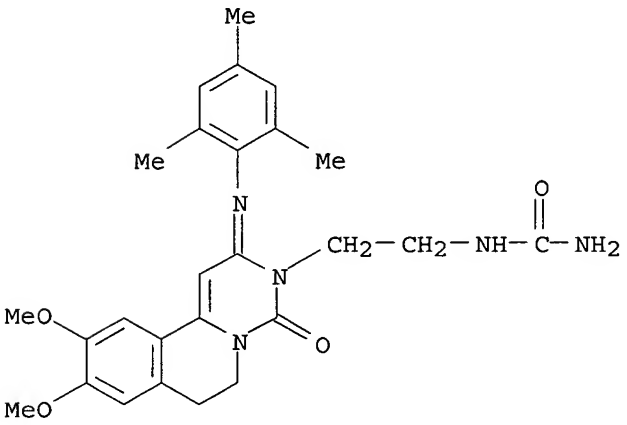
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003235631	A1	20031225	
APPLICATION INFO.:	US 2003-387060	A1	20030312	(10)

	NUMBER	DATE

PRIORITY INFORMATION: US 2002-389181P 20020617 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PFIZER INC, 150 EAST 42ND STREET, 5TH FLOOR - STOP 49, NEW YORK, NY, 10017-5612
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 1308
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method of treating depression or anxiety in a mammal, including a human, by administering to the mammal a PDE IV inhibitor in combination with an antidepressant or an anxiolytic agent. It also relates to pharmaceutical compositions containing a pharmaceutically acceptable carrier, a PDE IV inhibitor and an anxiolytic agent or antidepressant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **298680-25-8**
(treatment for depression and anxiety by combination of a PDE IV inhibitor and an antidepressant or an anxiolytic agent)
RN 298680-25-8 USPATFULL
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



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                 OR 298680-26-9/BI OR 298680-27-0/BI OR 298680-28-1/BI OR
                298680-29-2/BI OR 298680-30-5/BI OR 298680-31-6/BI OR 298680-32
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                298680-36-1/BI OR 298680-37-2/BI OR 298680-38-3/BI OR 298680-39
                -4/BI OR 298680-40-7/BI OR 298680-41-8/BI OR 298680-42-9/BI OR
                298680-43-0/BI OR 298680-44-1/BI OR 298680-45-2/BI OR 298680-46
                -3/BI OR 298680-47-4/BI OR 298680-48-5/BI OR 298680-49-6/BI OR
                298680-50-9/BI OR 3173-53-3/BI OR 5394-18-3/BI OR 574-98-1/BI
                OR 61832-41-5/BI OR 62-56-6/BI OR 75-31-0/BI OR 75535-96-5/BI
                OR 76536-66-8/BI OR 88-05-1/BI OR 9036-21-9/BI OR 95-53-4/BI)
L3           29 SEA ABB=ON  PLU=ON  L2 AND NCNC3/ESS

     FILE 'HCAPLUS' ENTERED AT 11:24:11 ON 13 OCT 2005
L4            1 SEA ABB=ON  PLU=ON  L1 AND L3
                D IALL HITSTR

     FILE 'REGISTRY' ENTERED AT 11:26:21 ON 13 OCT 2005
L5              STR
L6            0 SEA SSS SAM L5
                D QUE
L7            0 SEA SSS SAM L5
L8           14 SEA SSS FUL L5

     FILE 'HCAPLUS' ENTERED AT 11:32:39 ON 13 OCT 2005
L9            2 SEA ABB=ON  PLU=ON  L8

     FILE 'MEDLINE, EMBASE, BIOSIS, USPATFULL, USPAT2' ENTERED AT 11:33:04 ON
     13 OCT 2005
L10           5 SEA ABB=ON  PLU=ON  L8

     FILE 'HCAPLUS, USPATFULL, USPAT2' ENTERED AT 11:33:23 ON 13 OCT 2005
L11           6 DUP REM L9 L10 (1 DUPLICATE REMOVED)
                      ANSWERS '1-2' FROM FILE HCAPLUS
                      ANSWERS '3-6' FROM FILE USPATFULL

     FILE 'BEILSTEIN' ENTERED AT 11:34:32 ON 13 OCT 2005
L12           0 SEA SSS FUL L5

     FILE 'MARPAT' ENTERED AT 11:35:20 ON 13 OCT 2005
L13           0 SEA SSS SAM L5
L14           1 SEA SSS FUL L5
L15           0 SEA ABB=ON  PLU=ON  L14 NOT L9


     FILE HOME
```

FILE HCAPLUS

FILE COVERS 1907 - 13 Oct 2005 VOL 143 ISS 16
FILE LAST UPDATED: 12 Oct 2005 (20051012/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 OCT 2005 HIGHEST RN 865114-63-2
DICTIONARY FILE UPDATES: 12 OCT 2005 HIGHEST RN 865114-63-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

****
* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
****

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE MEDLINE
FILE LAST UPDATED: 12 OCT 2005 (20051012/UP). FILE COVERS 1950 TO DATE.

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP

RLOAD at an arrow promt (=>). See also:

http://www.nlm.nih.gov/mesh/
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE EMBASE
FILE COVERS 1974 TO 6 Oct 2005 (20051006/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 12 October 2005 (20051012/ED)

FILE RELOADED: 19 October 2003.

FILE USPATFULL
FILE COVERS 1971 TO PATENT PUBLICATION DATE: 11 Oct 2005 (20051011/PD)
FILE LAST UPDATED: 11 Oct 2005 (20051011/ED)
HIGHEST GRANTED PATENT NUMBER: US6954941
HIGHEST APPLICATION PUBLICATION NUMBER: US2005223461
CA INDEXING IS CURRENT THROUGH 11 Oct 2005 (20051011/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 11 Oct 2005 (20051011/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2005

>>> USPAT2 is now available. USPATFULL contains full text of the <<<
>>> original, i.e., the earliest published granted patents or <<<
>>> applications. USPAT2 contains full text of the latest US <<<
>>> publications, starting in 2001, for the inventions covered in <<<
>>> USPATFULL. A USPATFULL record contains not only the original <<<
>>> published document but also a list of any subsequent <<<
>>> publications. The publication number, patent kind code, and <<<
>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<

>>> USPATFULL and USPAT2 can be accessed and searched together <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
>>> <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE USPAT2

FILE COVERS 2001 TO PUBLICATION DATE: 13 Oct 2005 (20051013/PD)
FILE LAST UPDATED: 13 Oct 2005 (20051013/ED)
HIGHEST GRANTED PATENT NUMBER: US2005054189
HIGHEST APPLICATION PUBLICATION NUMBER: US2005229256
CA INDEXING IS CURRENT THROUGH 13 Oct 2005 (20051013/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 13 Oct 2005 (20051013/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2005

USPAT2 is a companion file to USPATFULL. USPAT2 contains full text of the latest US publications, starting in 2001, for the inventions covered in USPATFULL. USPATFULL contains full text of the original published US patents from 1971 to date and the original applications from 2001. In addition, a USPATFULL record for an invention contains a complete list of publications that may be searched in standard search fields, e.g., /PN, /PK, etc.

USPATFULL and USPAT2 can be accessed and searched together through the new cluster USPATALL. Type FILE USPATALL to enter this cluster.

Use USPATALL when searching terms such as patent assignees, classifications, or claims, that may potentially change from the earliest to the latest publication.

FILE BEILSTEIN
FILE LAST UPDATED ON OCTOBER 10, 2005

FILE COVERS 1771 TO 2005.
FILE CONTAINS 9,363,954 SUBSTANCES

>>>PLEASE NOTE: Reaction Data and substance data are stored in separate documents and can not be searched together in one query. Reaction data for BEILSTEIN compounds may be displayed immediately with the display codes PRE (preparations) and REA (reactions). A substance answer set retrieved after the search for a chemical name, a compounds with available reaction information by combining with PRE/FA, REA/FA or more generally with RX/FA. The BEILSTEIN Registry Number (BRN) is the link between a BEILSTEIN compound and belonging reactions. For mo detailed reaction searches BRNs can be searched as reaction partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

****
* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST. *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE *
* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS. *
* FOR PRICE INFORMATION SEE HELP COST *
****

NEW
*** PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE**

SEARCHED, SELECTED AND TRANSFERRED.
*** NEW DISPLAY FORMATS ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES, ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A COMPOUND AT A GLANCE.**

FILE MARPAT
FILE CONTENT: 1988-PRESENT (VOL 143 ISS 15)(20051007/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6916824 12 JUL 2005
DE 10359831 14 JUL 2005
EP 1550665 06 JUL 2005
JP 2005183717 07 JUL 2005
WO 2005079855 01 SEP 2005

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

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L5                STR
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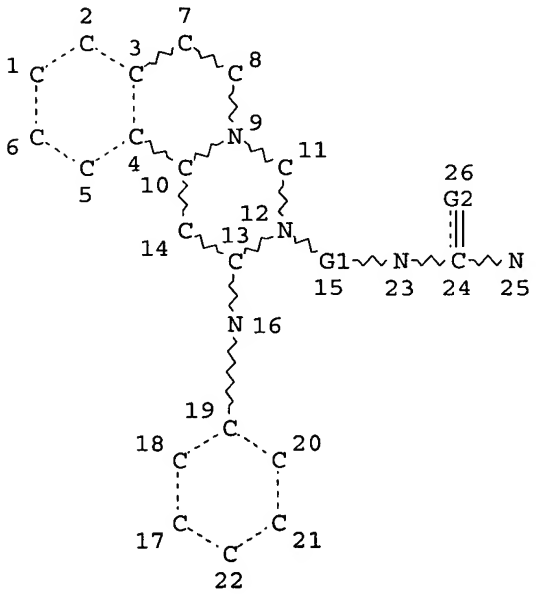


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VAR G2=O/27/29/NH/31
NODE ATTRIBUTES:
CONNECT IS E3  RC AT  13
CONNECT IS E2  RC AT  16
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  32

STEREO ATTRIBUTES: NONE
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L8            14 SEA FILE=REGISTRY SSS FUL L5
L9             2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8
L10            5 SEA L8
L11            6 DUP REM L9 L10 (1 DUPLICATE REMOVED)

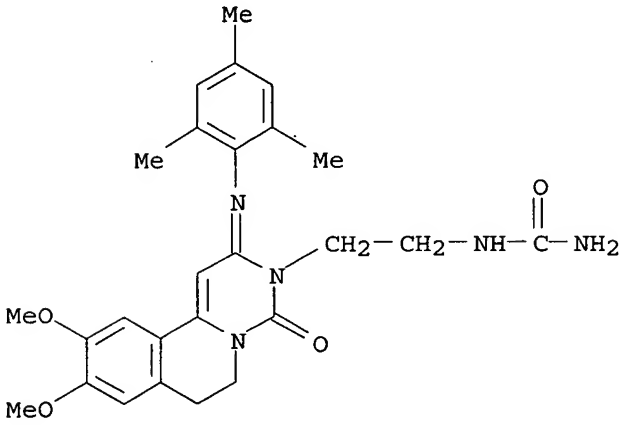

=> d l11 ibib abs hitstr 1-6
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, USPATFULL' - CONTINUE? (Y)/N:y


L11  ANSWER 1 OF 6  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2003:1006815  HCAPLUS
DOCUMENT NUMBER:          140:35974
TITLE:                    Treatment for depression and anxiety by the
                          combination of a PDE IV inhibitor and an
                          antidepressant or an anxiolytic agent
INVENTOR(S):              Sobolov-Jaynes, Susan Beth; Schmidt, Christopher
                          Joseph
PATENT ASSIGNEE(S):       Pfizer Products Inc., USA
SOURCE:                   PCT Int. Appl., 62 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 2003105902         A1    20031224    WO 2003-IB2295          20030605
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2003235631         A1    20031225    US 2003-387060          20030312
     CA 2488138            AA    20031224    CA 2003-2488138         20030605
     EP 1517707            A1    20050330    EP 2003-727833          20030605
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     BR 2003011903         A     20050607    BR 2003-11903           20030605
PRIORITY APPLN. INFO.:                       US 2002-389181P      P  20020617
                                             WO 2003-IB2295       W  20030605

OTHER SOURCE(S):          MARPAT 140:35974
AB   The present invention relates to a method of treating depression or
     anxiety in a mammal, including a human, by administering to the mammal a
     PDE IV inhibitor in combination with an antidepressant or an anxiolytic
     agent.  It also relates to pharmaceutical compns. containing a
     pharmaceutically acceptable carrier, a PDE IV inhibitor and an anxiolytic
     agent or antidepressant.
IT   298680-25-8
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (treatment for depression and anxiety by combination of a PDE IV
```

inhibitor and an antidepressant or an anxiolytic agent)
RN 298680-25-8 HCAPLUS
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:707163 HCAPLUS
DOCUMENT NUMBER: 133:266869
TITLE: Preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors.
INVENTOR(S): Oxford, Alexander William; Jack, David
PATENT ASSIGNEE(S): Vanguard Medica Ltd., UK
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

applicant's

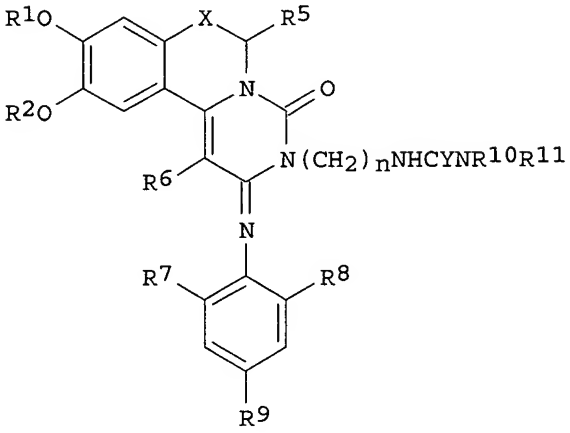
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000058308	A1	20001005	WO 2000-GB1193	20000329
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
NZ 514158	A	20000329	NZ 2000-514158	20000329
CA 2368413	AA	20001005	CA 2000-2368413	20000329
AU 2000041274	A5	20001016	AU 2000-41274	20000329
AU 773504	B2	20040527		
EP 1165558	A1	20020102	EP 2000-920857	20000329
EP 1165558	B1	20030924		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

BR 2000009446	A	20020115	BR 2000-9446		20000329
JP 2002540207	T2	20021126	JP 2000-608010		20000329
AT 250602	E	20031015	AT 2000-920857		20000329
PT 1165558	T	20040227	PT 2000-920857		20000329
ES 2208310	T3	20040616	ES 2000-920857		20000329
US 2003036542	A1	20030220	US 2001-964260		20010926
US 6794391	B2	20040921			
NO 2001004728	A	20011123	NO 2001-4728		20010928
US 2004171828	A1	20040902	US 2004-786650		20040224
US 2004176353	A1	20040909	US 2004-786400		20040224
PRIORITY APPLN. INFO.:			GB 1999-7454	A	19990331
			GB 1999-9802	A	19990428
			WO 2000-GB1193	W	20000329
			US 2001-964260	A3	20010926

OTHER SOURCE(S): MARPAT 133:266869

GI



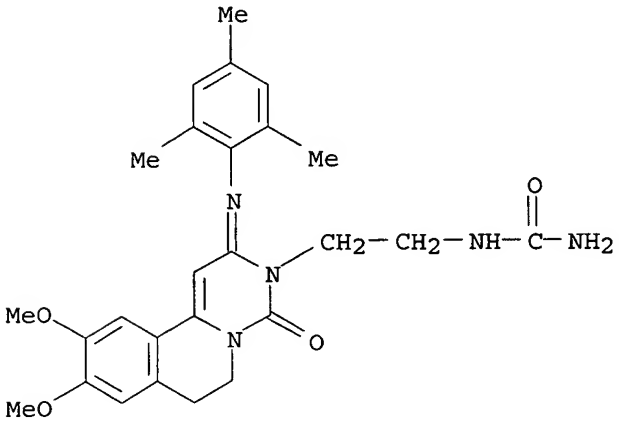
I

AB Title compds. [I; R1, R2 = alkyl, acyl; R5 = H, alkyl, alkenyl, alkynyl; R6 = H, alkyl, alkenyl, alkynyl, amino, alkylamino, dialkylamino, acylamino; R7, R8 = H, halo, OH, CF3, alkyl, alkenyl, alkynyl, acyl, alkythio, alkoxy, cycloalkyl; R9 = H, halo, OH, CF3, alkyl, alkenyl, alkynyl, acyl, alkythio, alkoxy, cycloalkyl; X = OCH2, CR3R4; R3, R4 = H, alkyl; R10, R11 = H, alkyl, cycloalkyl, Ph; Y = O, CHNO2, NCN, NH, NNO2; n = 2-4], were prepared I have a longer duration of action than the known compound trequinsin (9,10-dimethoxy-3-methyl-2-mesitylimino-2,3,6,7-tetrahydro-4H--pyrimido[6,1-a]isoquinolin-4-one) and do not have trequinsin's very bitter taste. Thus, Na cyanate was added dropwise to 9,10-dimethoxy-2-(2,4,6-trimethylphenylimino)-3-(2-aminoethyl)-3,4,6,7-tetrahydro-2H-pyrimido[6,1-a]isoquinolin-4-one (preparation given) in aqueous HCl at 80° followed by stirring for 2 h to give 54% 9,10-dimethoxy-2-(2,4,6-trimethylphenylimino)-3-(N-carbamoyl-2-aminoethyl)-3,4,6,7-tetrahydro-2H-pyrimido[6,1-a]isoquinolin-4-one(II). II inhibited PDE3 with IC50 = 0.46 μM and was tasteless.

IT **298680-25-8P 298680-26-9P 298680-27-0P**
298680-28-1P 298680-29-2P 298680-30-5P

298680-31-6P 298680-32-7P 298680-33-8P
298680-34-9P 298680-35-0P 298680-36-1P
298680-37-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)

RN 298680-25-8 HCAPLUS
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



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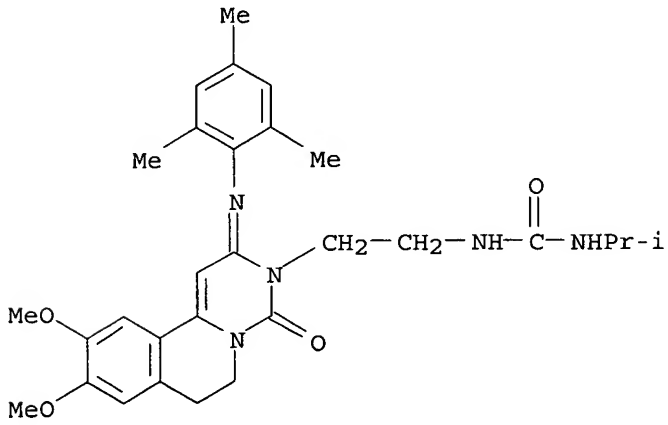
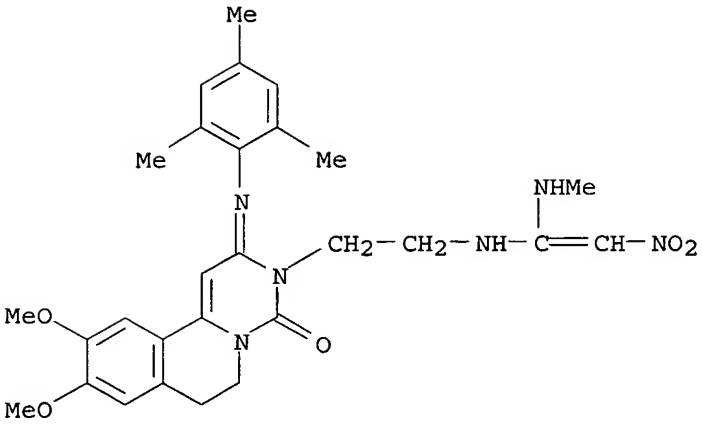
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 298680-27-0 HCAPLUS
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-(methylamino)-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



RN 298680-28-1 HCAPLUS
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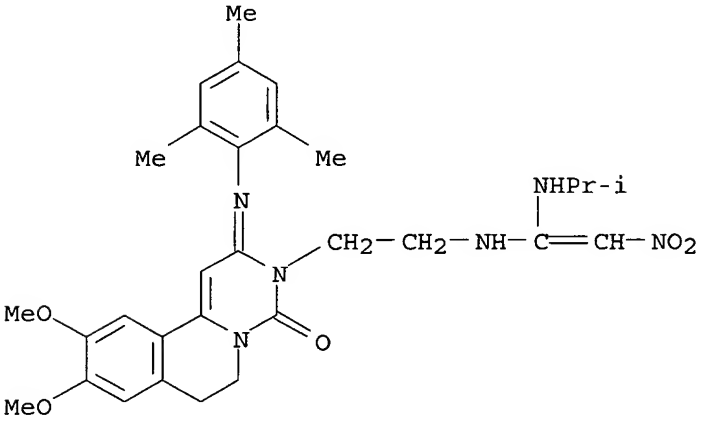

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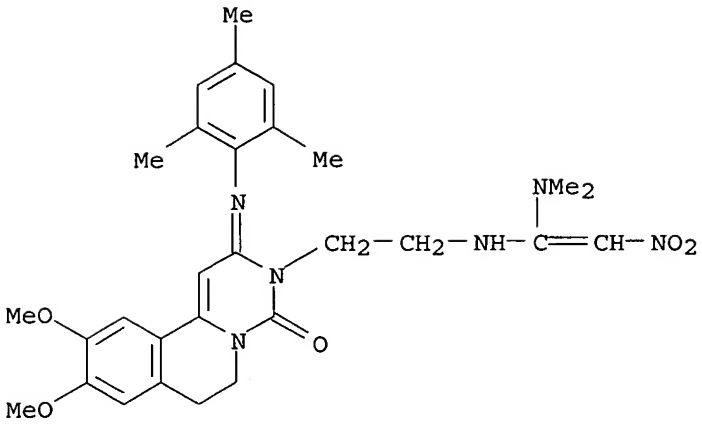
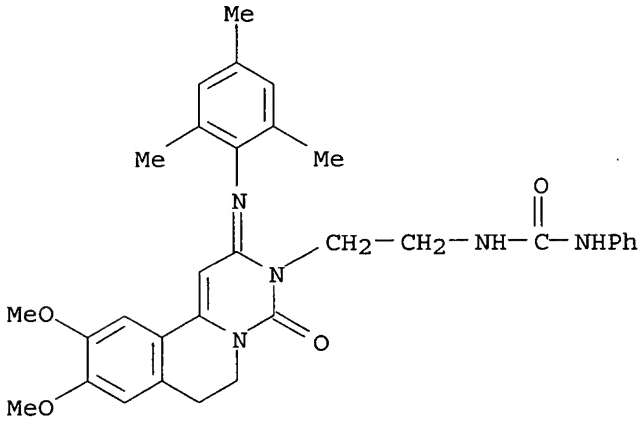
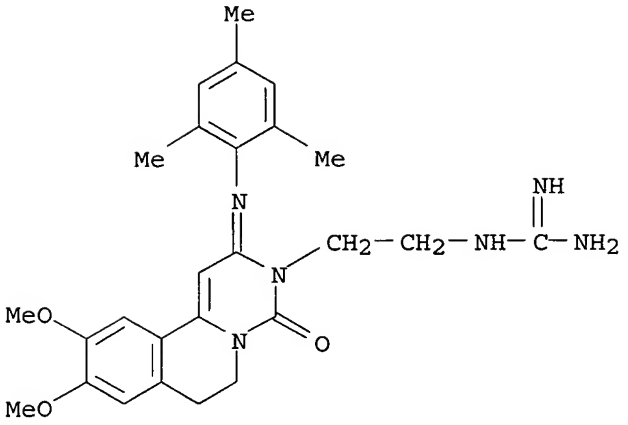
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 3-[2-[[1-(dimethylamino)-2-nitroethenyl]amino]ethyl]-2,3,6,7-tetrahydro-9,10-dimethoxy-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



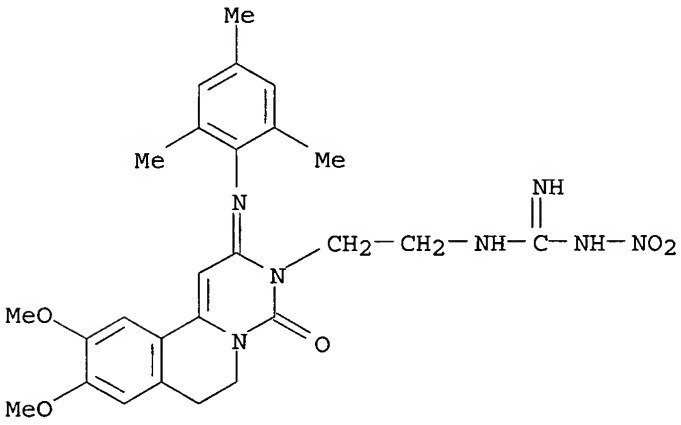
RN 298680-30-5 HCAPLUS
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)



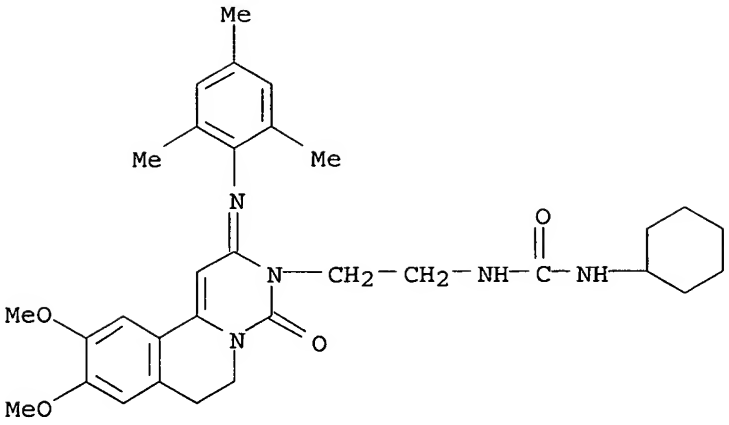
RN 298680-31-6 HCAPLUS
CN Guanidine, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



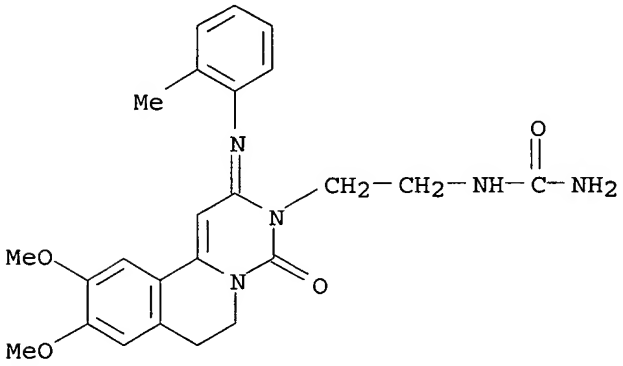
RN 298680-32-7 HCAPLUS
CN Guanidine, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-nitro- (9CI) (CA INDEX NAME)



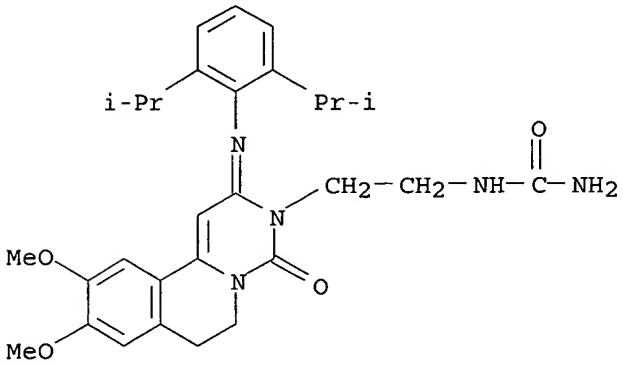
RN 298680-33-8 HCAPLUS
CN Urea, N-cyclohexyl-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



RN 298680-34-9 HCAPLUS
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-2-[(2-methylphenyl)imino]-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)

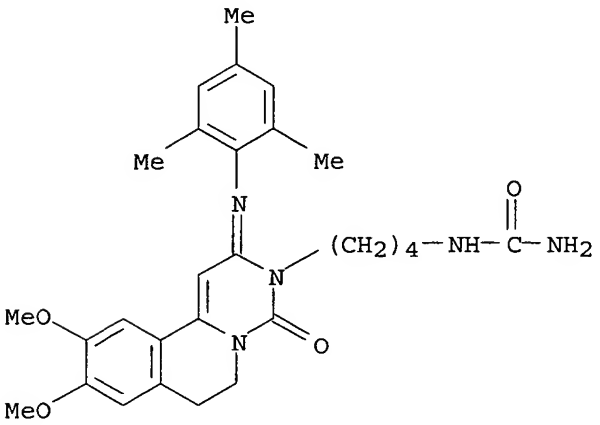


RN 298680-35-0 HCAPLUS
CN Urea, [2-[2-[[2,6-bis(1-methylethyl)phenyl]imino]-6,7-dihydro-9,10-dimethoxy-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)

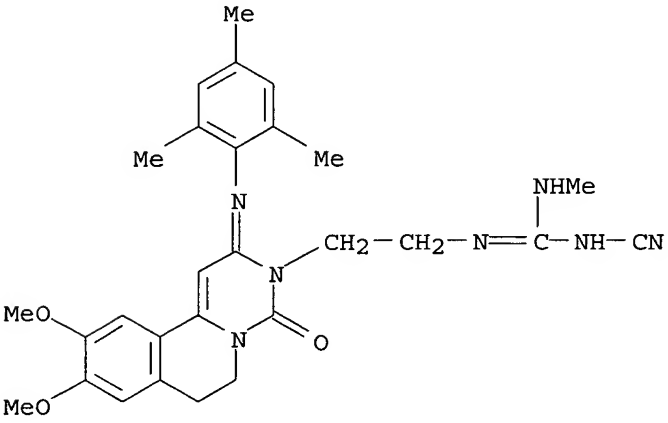


RN 298680-36-1 HCAPLUS

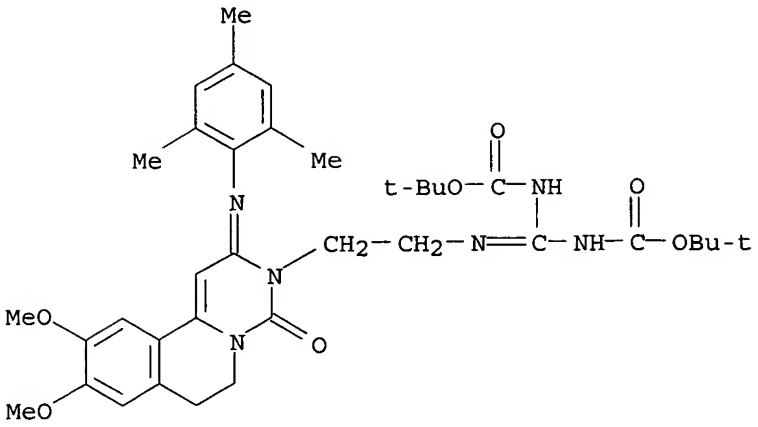
CN Urea, [4-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]butyl]- (9CI) (CA INDEX NAME)



RN 298680-37-2 HCAPLUS
CN Guanidine, N-cyano-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N''-methyl- (9CI) (CA INDEX NAME)



IT **298680-40-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)
RN 298680-40-7 HCAPLUS
CN Carbamic acid, [[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]carbonimidoyl]bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 6 USPATFULL on STN DUPLICATE 1

ACCESSION NUMBER:	2003:51584 USPATFULL		
TITLE:	Derivatives of pyrimido[6.1-a]isoquinolin-4-one		
INVENTOR(S):	Oxford, Alexander William, Royston, UNITED KINGDOM Jack, David, Wheathampstead, UNITED KINGDOM		

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003036542	A1	20030220	
	US 6794391	B2	20040921	
APPLICATION INFO.:	US 2001-964260	A1	20010926	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1999-7454	19990331
	GB 1999-9802	19990428

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Dike, Bronstein, Roberts & Cushman, Intellectual Property Patent Practice, EDWARDS & ANGELL, LLP, P.O. Box 9169, Boston, MA, 02209
NUMBER OF CLAIMS:	50
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	5 Drawing Page(s)
LINE COUNT:	1581

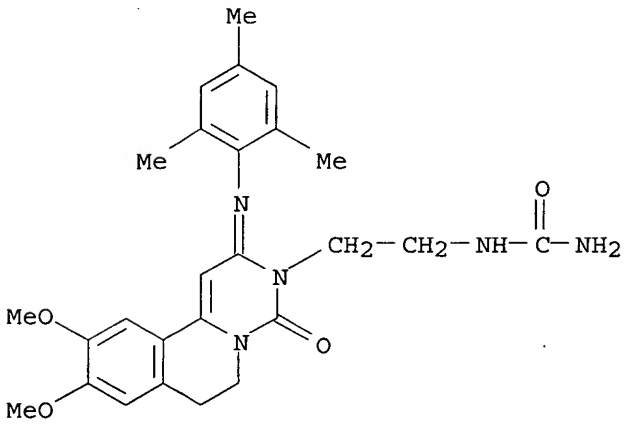
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides compounds or salts thereof of the general formula (I): ##STR1##

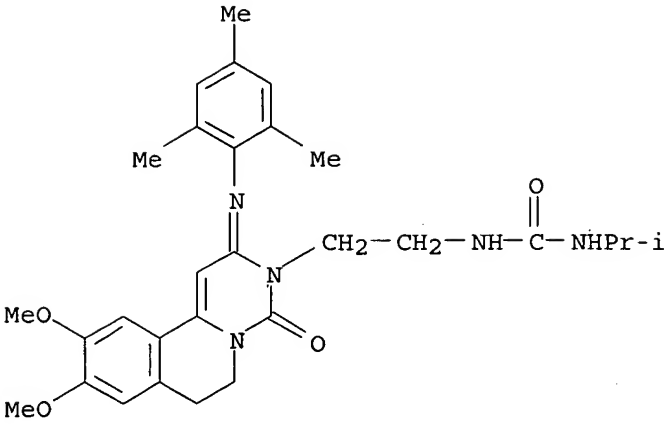
wherein each of R.sup.1 and RX independently represents a C.sub.1-6 alkyl or C.sub.2-7 acyl group; X represents OCH.sub.2 or a group CR.sup.3R.sup.4; wherein each of R.sup.3 or R.sup.4 independently represents a hydrogen atom or a C.sub.1-3 alkyl group; R.sup.5 represents a hydrogen atom or a C.sub.1-3 alkyl, C.sub.2-3 alkenyl or C.sub.2-3 alkynyl group; R.sup.6 represents a hydrogen atom or a C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, amino, C.sub.1-6alkylamino, di(C.sub.1-6) alkylamino or C.sub.2-7 acylamino group; each of R.sup.7 and R.sup.8 independently represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C.sub.1-6 alkyl,

C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, C.sub.2-7 acyl, C.sub.1-6 alkylthio, C.sub.1-6 alkoxy, C.sub.3-6 cycloalkyl; and R.sup.9 represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, C.sub.2-7 acyl, C.sub.1-6 alkylthio, C.sub.1-6 alkoxy or C.sub.3-6 cycloalkyl group. The compounds or salts thereof are useful for treatment of respiratory disorders such as asthma. Compounds of the invention have a longer duration of action than the known compound trequinsin (9,10-dimethoxy-3 methyl-2-mesitylimino-2,3,6,7-tetrahydro-.sub.4-H-pyrimido[6,1-a]isoquinolin-4-one).

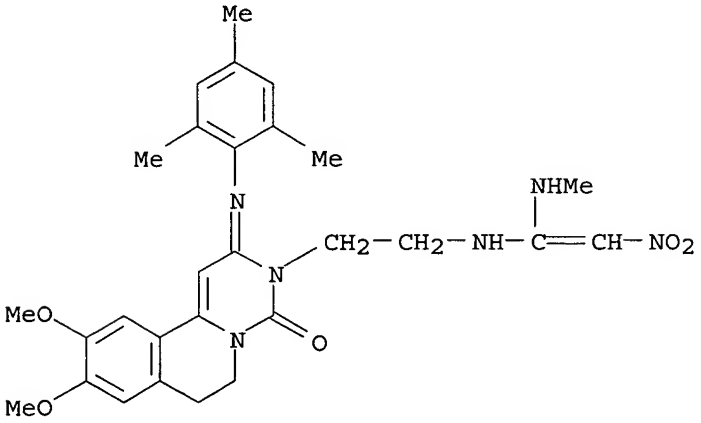
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **298680-25-8P 298680-26-9P 298680-27-0P**
298680-28-1P 298680-29-2P 298680-30-5P
298680-31-6P 298680-32-7P 298680-33-8P
298680-34-9P 298680-35-0P 298680-36-1P
298680-37-2P
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)
RN 298680-25-8 USPATFULL
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



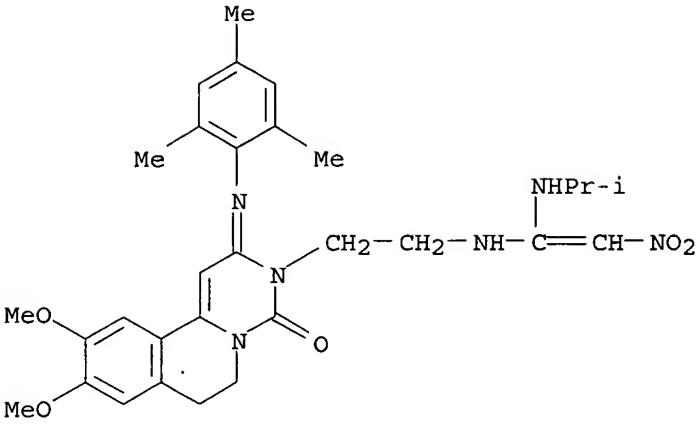
RN 298680-26-9 USPATFULL
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-(1-methylethyl)- (9CI) (CA INDEX NAME)



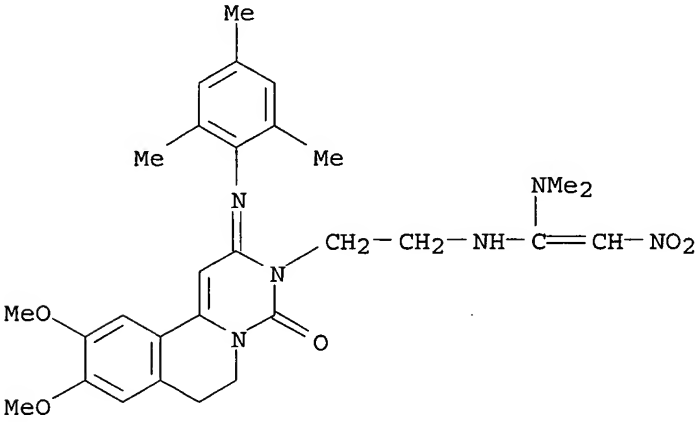
RN 298680-27-0 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-(methylamino)-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



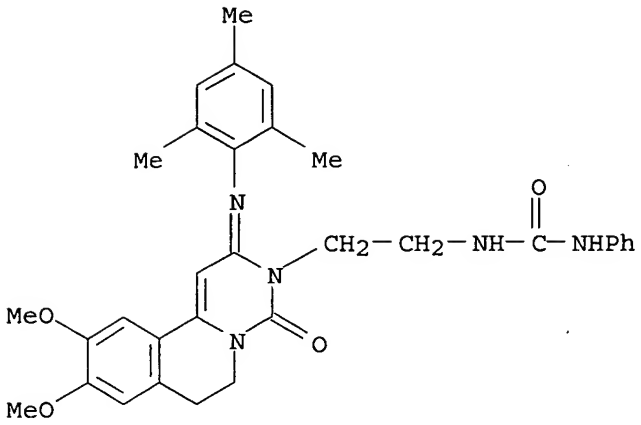
RN 298680-28-1 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-[(1-methylethyl)amino]-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



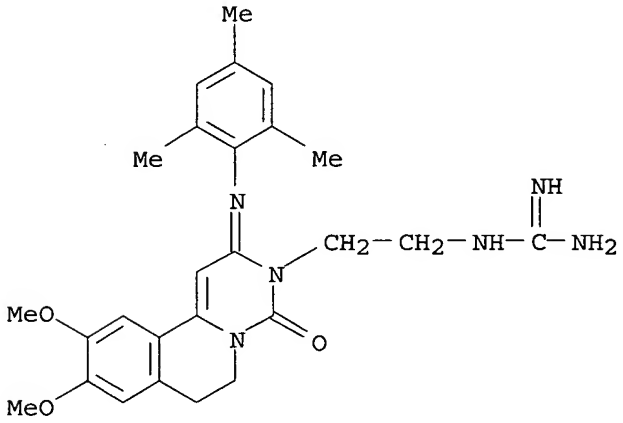
RN 298680-29-2 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 3-[2-[[1-(dimethylamino)-2-nitroethenyl]amino]ethyl]-2,3,6,7-tetrahydro-9,10-dimethoxy-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



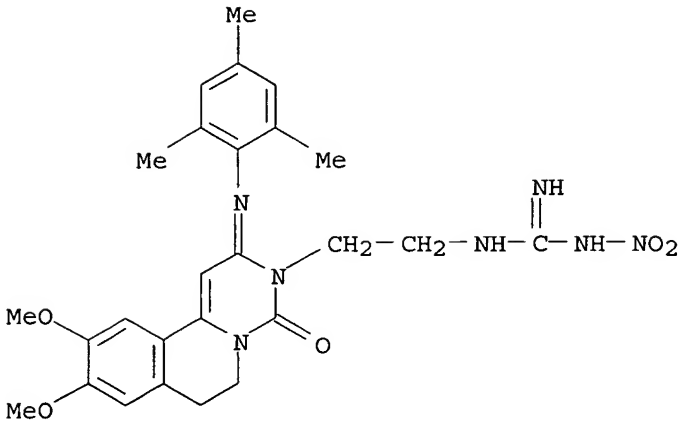
RN 298680-30-5 USPATFULL
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)



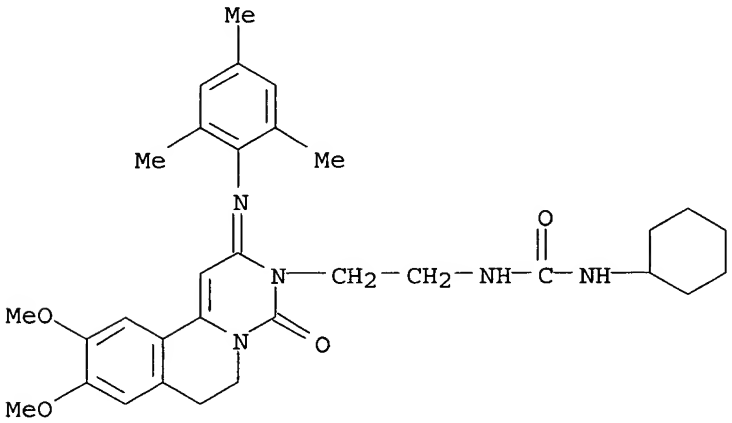
RN 298680-31-6 USPATFULL
CN Guanidine, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-(9CI) (CA INDEX NAME)



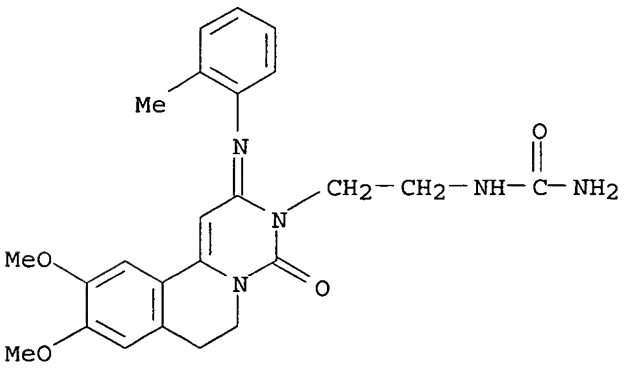
RN 298680-32-7 USPATFULL
CN Guanidine, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-nitro- (9CI) (CA INDEX NAME)



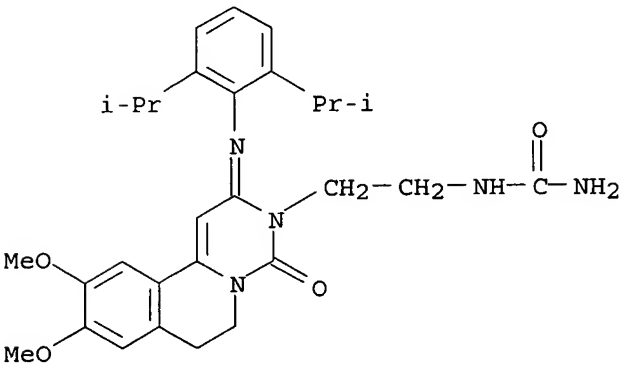
RN 298680-33-8 USPATFULL
CN Urea, N-cyclohexyl-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



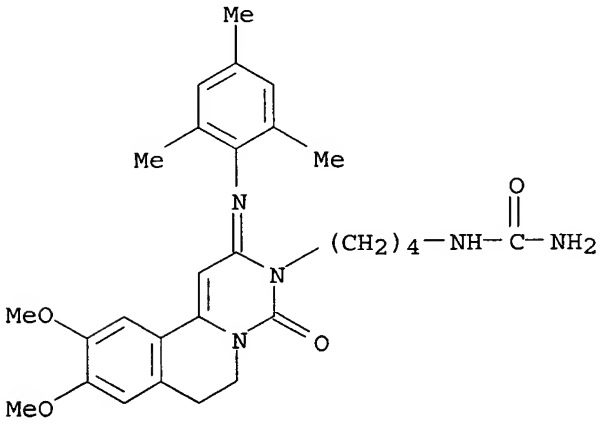
RN 298680-34-9 USPATFULL
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-2-[(2-methylphenyl)imino]-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



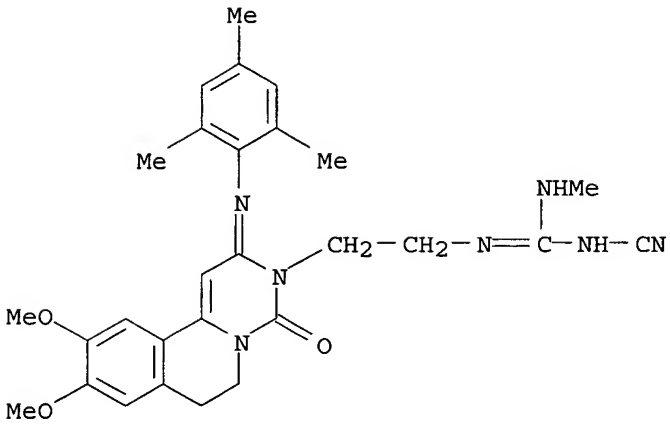
RN 298680-35-0 USPATFULL
CN Urea, [2-[2-[[2,6-bis(1-methylethyl)phenyl]imino]-6,7-dihydro-9,10-dimethoxy-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



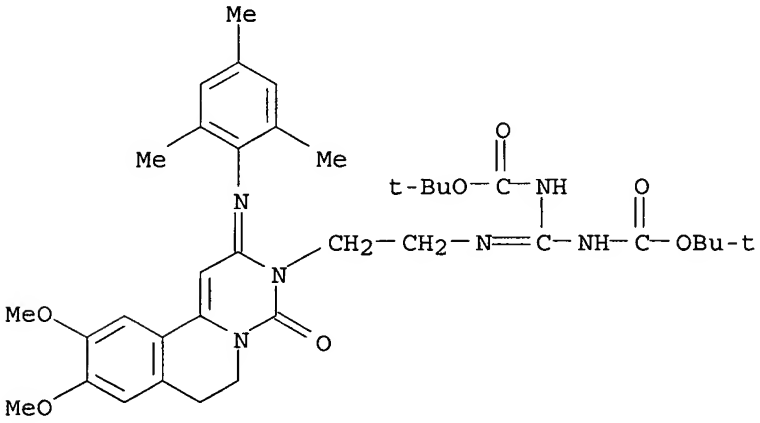
RN 298680-36-1 USPATFULL
CN Urea, [4-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]butyl]- (9CI) (CA INDEX NAME)



RN 298680-37-2 USPATFULL
CN Guanidine, N-cyano-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N''-methyl- (9CI) (CA INDEX NAME)



IT **298680-40-7P**
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)
RN 298680-40-7 USPATFULL
CN Carbamic acid, [[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]carbonimidoyl]bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



L11 ANSWER 4 OF 6 USPATFULL on STN
ACCESSION NUMBER: 2004:227967 USPATFULL
TITLE: Derivatives of pyrimido[6,1-a]isoquinolin-4-one
INVENTOR(S): Oxford, Alexander William, Royston, UNITED KINGDOM
Jack, David, Wheathampstead, UNITED KINGDOM
PATENT ASSIGNEE(S): Vernalis Limited (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004176353	A1	20040909
APPLICATION INFO.:	US 2004-786400	A1	20040224 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-964260, filed on 26 Sep 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1999-7454	19990331
	GB 1999-9802	19990428
	WO 2000-58308	20001005

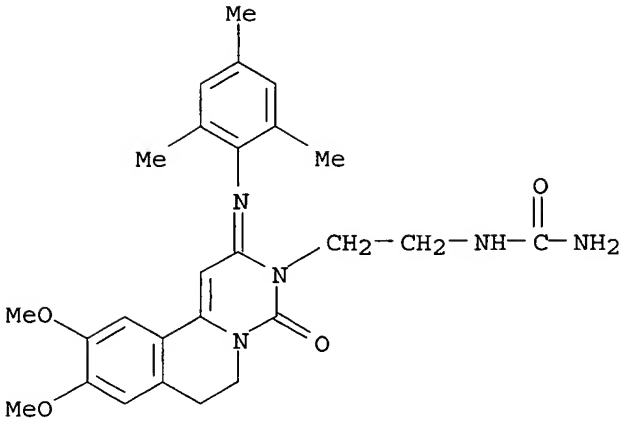
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: EDWARDS & ANGELL, LLP, P.O. BOX 55874, BOSTON, MA, 02205
NUMBER OF CLAIMS: 50
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1579
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds of general formula (I) wherein each of R.sup.1 and R.sup.2 independently represents a C.sub.1-6 alkyl or C.sub.2-7 acyl group; R.sup.5 represents a hydrogen atom or a C.sub.1-3 alkyl, C.sub.2-3 alkenyl or C.sub.2-3 alkynyl group; R.sup.6 represents a hydrogen atom or a C.sub.1-6 alkyl C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, amino, C.sub.1-6 alkylamino, di(C.sub.1-6) alkylamino or C.sub.2-7 acylamino group; each of R.sup.7 and R.sup.8 independently represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, C.sub.2-7 acyl, C.sub.1-6 alkythio, C.sub.3-6 alkoxy, C.sub.3-6 cycloalkyl; and R.sup.9 represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, C.sub.1-7 acyl, C.sub.1-6 alkythio. C.sub.1-6 alkoxy or C.sub.3-6 cycloalkyl group, X represents OCH.sub.2.sup.- or a group CR.sup.3R.sup.4, wherein each of R.sup.3 and R.sup.4 independently represents a hydrogen atom or a C.sub.1-3 alkyl group; each of R.sup.10 and R.sup.11 independently represents a hydrogen atom, a C.sub.1-3 alkyl C.sub.3-6 cycloalkyl or phenyl group; y represents an oxygen atom or a group CHNO.sub.2, NCN, NH or NNO.sub.2, n is an integer from 2 to 4; or a salt thereof; arm useful for treatment of respiratory disorders such as asthma. Compounds of the invention have a longer duration of action than the known compound trequinsin (9,10-dimethoxy-3-methyl-2-mesitylimino-2,3,6,7-tetrahydro-4H-pyrimido [6,1-a]isoquinolin-4-one) and do not have trequinsin's very bitter taste. ##STR1##

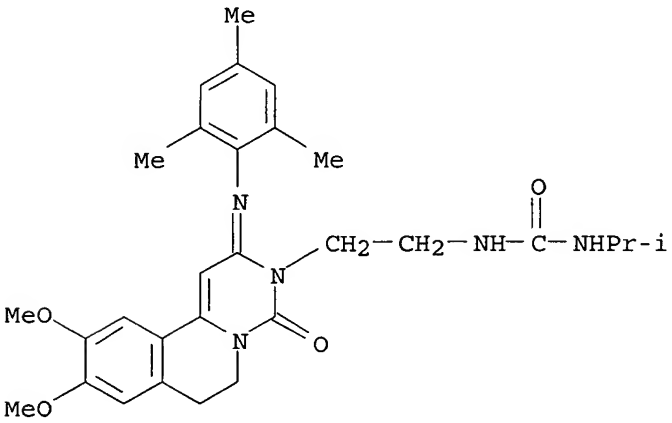
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **298680-25-8P 298680-26-9P 298680-27-0P**
298680-28-1P 298680-29-2P 298680-30-5P
298680-31-6P 298680-32-7P 298680-33-8P
298680-34-9P 298680-35-0P 298680-36-1P
298680-37-2P
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)

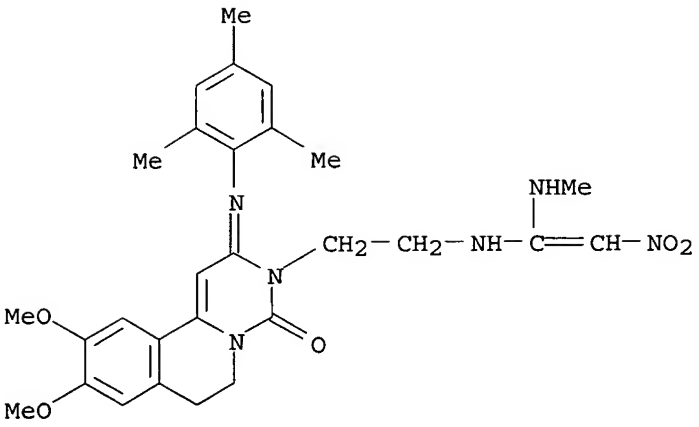
RN 298680-25-8 USPATFULL
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



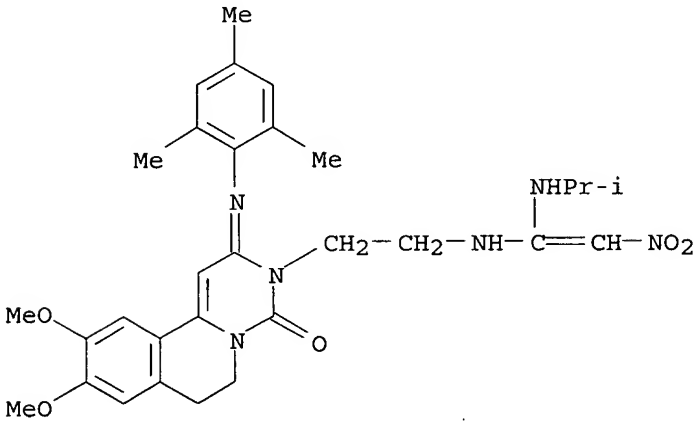
RN 298680-26-9 USPATFULL
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-(1-methylethyl)- (9CI) (CA INDEX NAME)



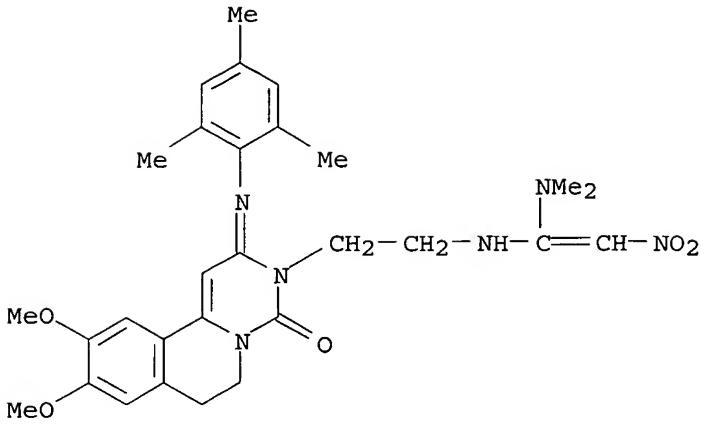
RN 298680-27-0 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-(methylamino)-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



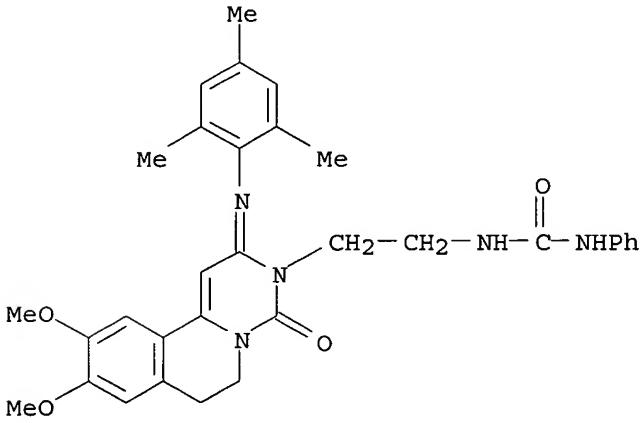
RN 298680-28-1 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-[(1-methylethyl)amino]-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



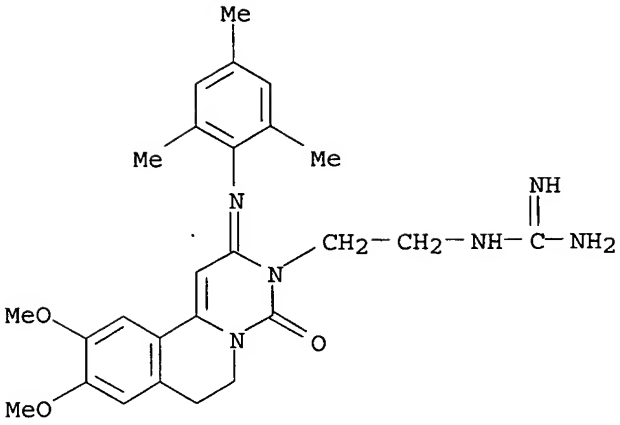
RN 298680-29-2 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 3-[2-[[1-(dimethylamino)-2-nitroethenyl]amino]ethyl]-2,3,6,7-tetrahydro-9,10-dimethoxy-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



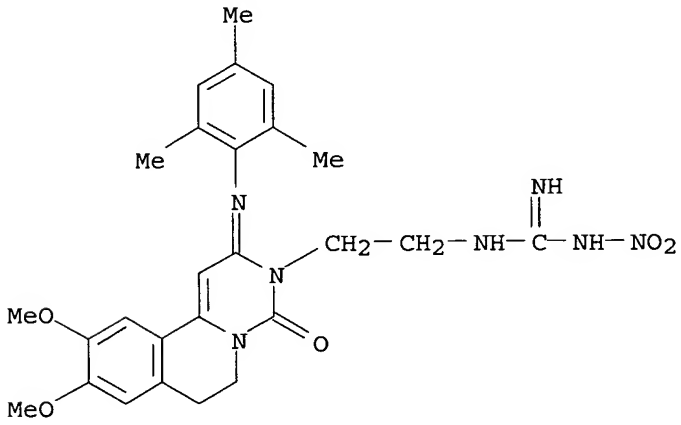
RN 298680-30-5 USPATFULL
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)



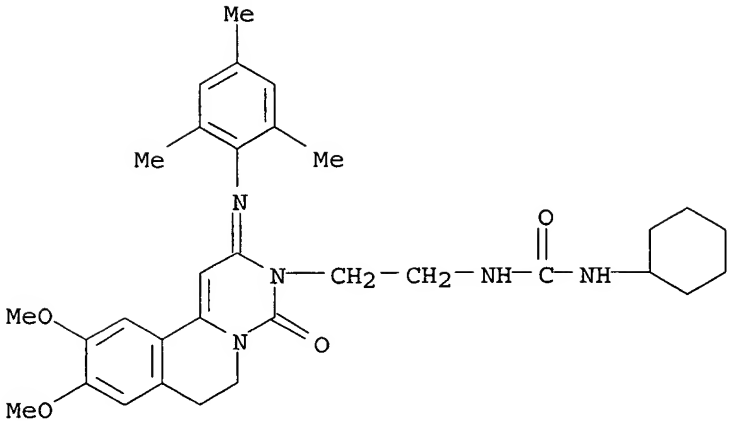
RN 298680-31-6 USPATFULL
CN Guanidine, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



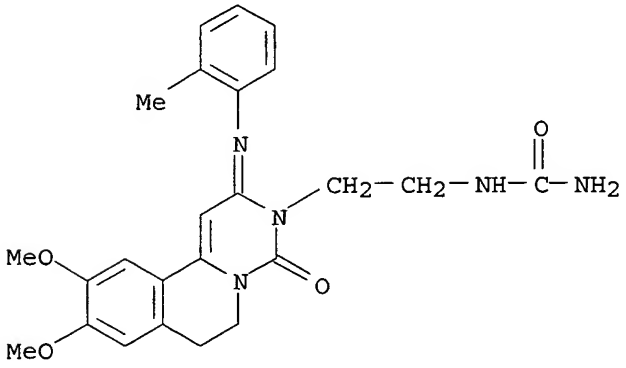
RN 298680-32-7 USPATFULL
CN Guanidine, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-nitro- (9CI) (CA INDEX NAME)



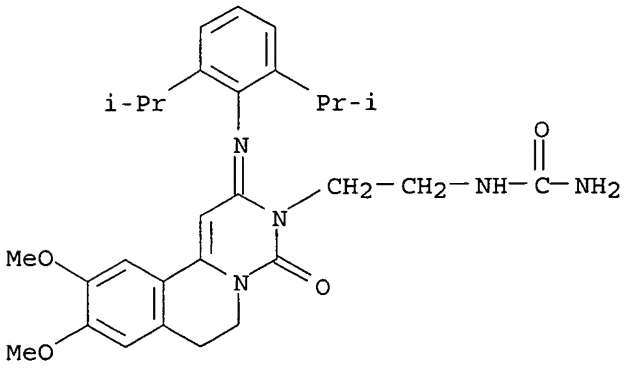
RN 298680-33-8 USPATFULL
CN Urea, N-cyclohexyl-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



RN 298680-34-9 USPATFULL
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-2-[(2-methylphenyl)imino]-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)

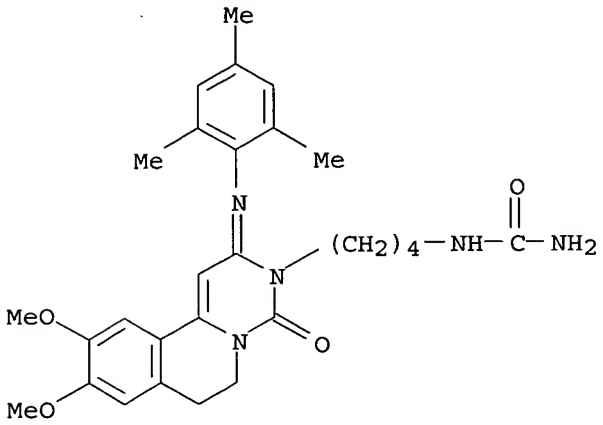


RN 298680-35-0 USPATFULL
CN Urea, [2-[2-[[2,6-bis(1-methylethyl)phenyl]imino]-6,7-dihydro-9,10-dimethoxy-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)

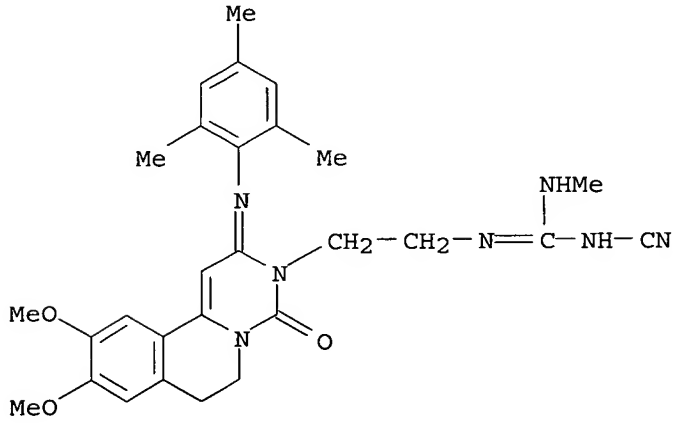


RN 298680-36-1 USPATFULL

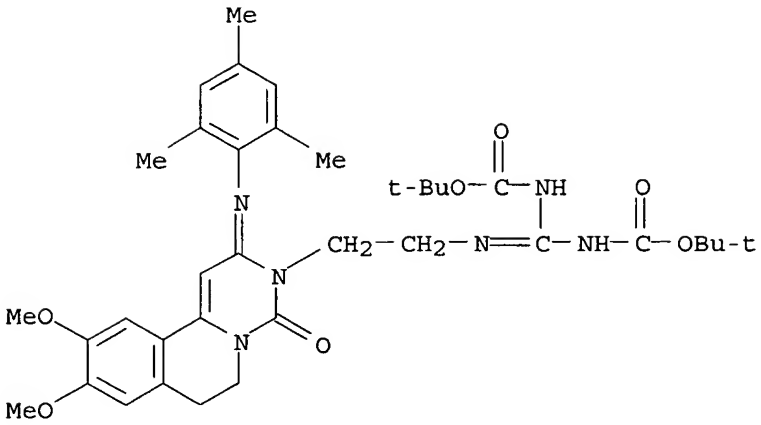
CN Urea, [4-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]butyl]- (9CI) (CA INDEX NAME)



RN 298680-37-2 USPATFULL
CN Guanidine, N-cyano-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N''-methyl- (9CI) (CA INDEX NAME)



IT **298680-40-7P**
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)
RN 298680-40-7 USPATFULL
CN Carbamic acid, [[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]carbonimidoyl]bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



L11 ANSWER 5 OF 6 USPATFULL on STN

ACCESSION NUMBER:	2004:222055 USPATFULL
TITLE:	Derivatives of pyrimido[6,1-a]isoquinolin-4-one
INVENTOR(S):	Oxford, Alexander William, Royston, UNITED KINGDOM Jack, David, Wheathampstead, UNITED KINGDOM
PATENT ASSIGNEE(S):	Vernalis Limited (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004171828	A1	20040902
APPLICATION INFO.:	US 2004-786650	A1	20040224 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-964260, filed on 26 Sep 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1999-7454	19990331
	GB 1999-9802	19990428

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Peter F. Corless, EDWARDS & ANGELL, LLP, P.O. Box 9169, Boston, MA, 02209
NUMBER OF CLAIMS:	50
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	5 Drawing Page(s)
LINE COUNT:	1565

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds of general formula (I) wherein each of R.sup.1 and R.sup.2 independently represents a C.sub.1-6 alkyl or C.sub.2-7 acyl group; R.sup.5 represents a hydrogen atom or a C.sub.1-3 alkyl, C.sub.2-3 alkenyl or C.sub.2-3 alkynyl group; R.sup.6 represents a hydrogen atom or a C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, amino, C.sub.1-6 alkylamino, di(C.sub.1-6) alkylamino or C.sub.2-7 acylamino group, each of R.sup.7 and R.sup.8 independently represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, C.sub.2-7 acyl, C.sub.1-6 alkythio, C.sub.1-6 alkoxy, C.sub.3-6 cycloalkyl; and R.sup.9 represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C.sub.1-6 alkyl, C.sub.2-6 alkenyl, C.sub.2-6 alkynyl, C.sub.2-7 acyl, C.sub.1-6 alkythio, C.sub.1-6 alkoxy or C.sub.3-6 cycloalkyl group; X represents OCH.sub.2 or a group CR.sup.3R.sup.4, wherein each of R.sup.3 and

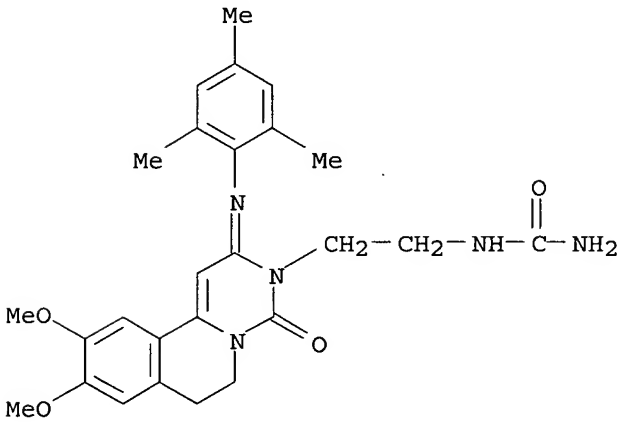
R.sup.4 independently represents a hydrogen atom or a C.sub.1-3 alkyl group; each of R.sup.10 and R.sup.11 independently represents a hydrogen atom, a C.sub.1-3 alkyl, C.sub.3-6 cycloalkyl or phenyl group; y represents an oxygen atom or a group CHNO.sub.2, NCN, NH or NNO.sub.2, n is an integer from 2 to 4; or a salt thereof; are useful for treatment of respiratory disorders such as asthma. Compounds of the invention have a longer duration of action than the known compound trequinsin (9,10-dimethoxy-3-methyl-2-mesitylimino-2,3,6,7-tetrahydro-4H-pyrimido[6,1-a]-isoquinolin-4-one) and do not have trequinsin's very bitter taste. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **298680-25-8P 298680-26-9P 298680-27-0P**
298680-28-1P 298680-29-2P 298680-30-5P
298680-31-6P 298680-32-7P 298680-33-8P
298680-34-9P 298680-35-0P 298680-36-1P
298680-37-2P
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)

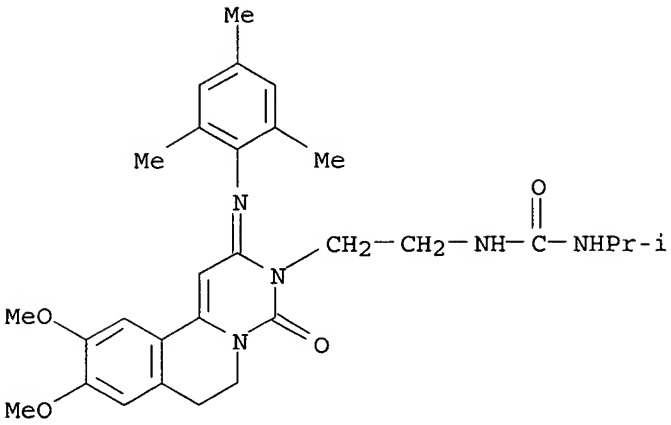
RN 298680-25-8 USPATFULL

CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)

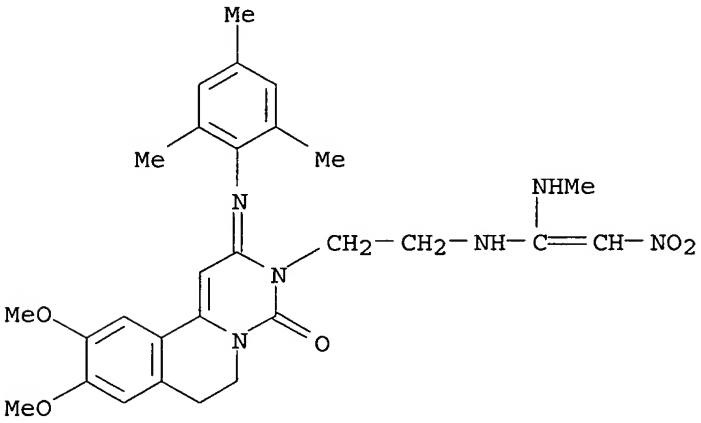


RN 298680-26-9 USPATFULL

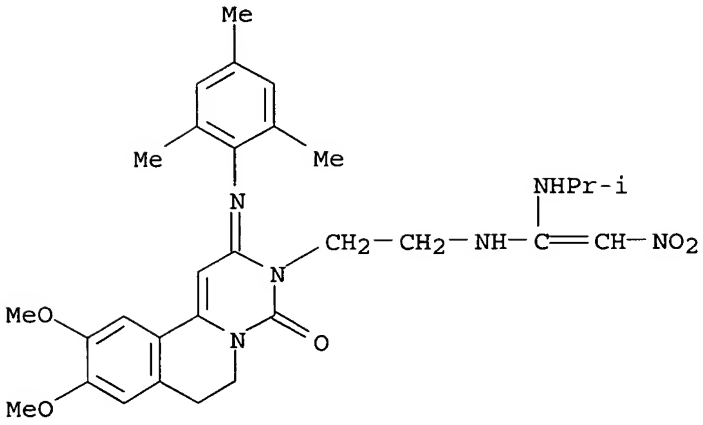
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-(1-methylethyl)- (9CI) (CA INDEX NAME)



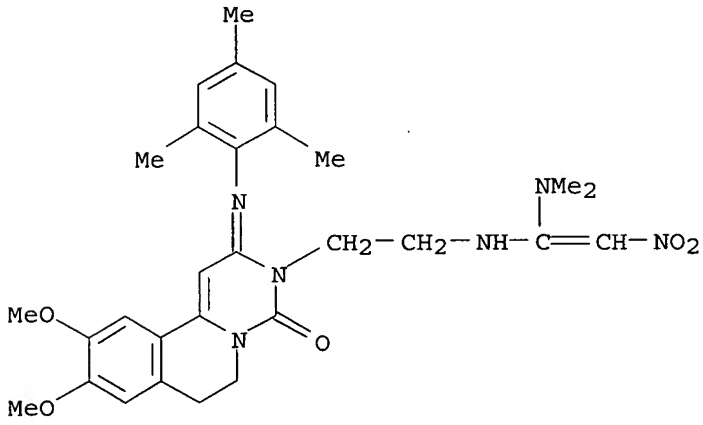
RN 298680-27-0 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-(methylamino)-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



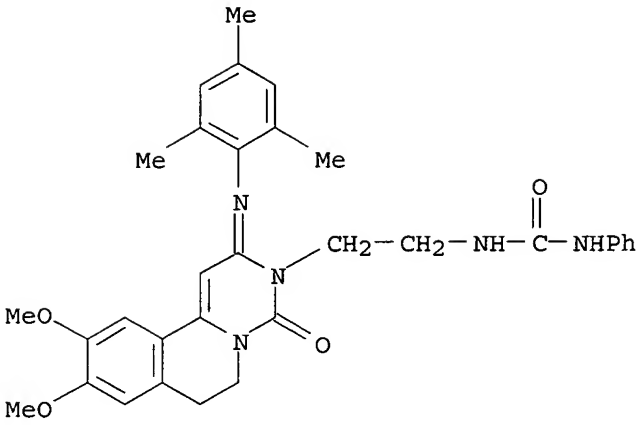
RN 298680-28-1 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 2,3,6,7-tetrahydro-9,10-dimethoxy-3-[2-[[1-[(1-methylethyl)amino]-2-nitroethenyl]amino]ethyl]-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



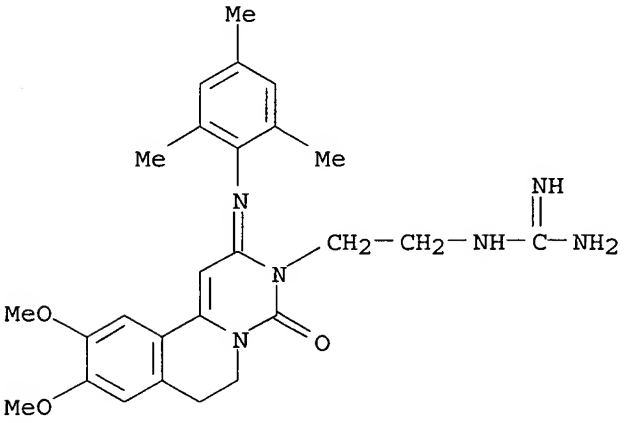
RN 298680-29-2 USPATFULL
CN 4H-Pyrimido[6,1-a]isoquinolin-4-one, 3-[2-[[1-(dimethylamino)-2-nitroethenyl]amino]ethyl]-2,3,6,7-tetrahydro-9,10-dimethoxy-2-[(2,4,6-trimethylphenyl)imino]- (9CI) (CA INDEX NAME)



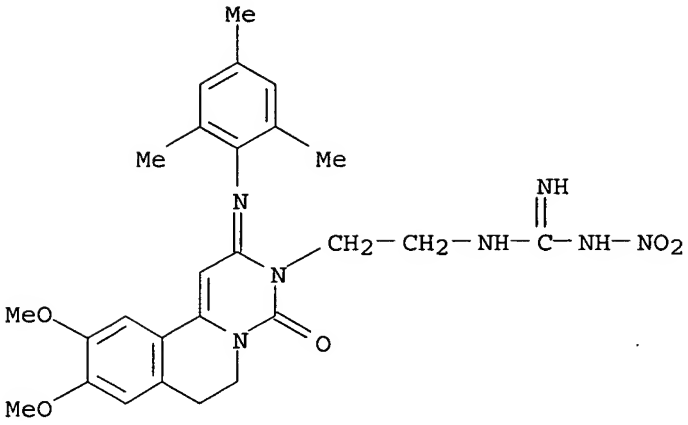
RN 298680-30-5 USPATFULL
CN Urea, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)



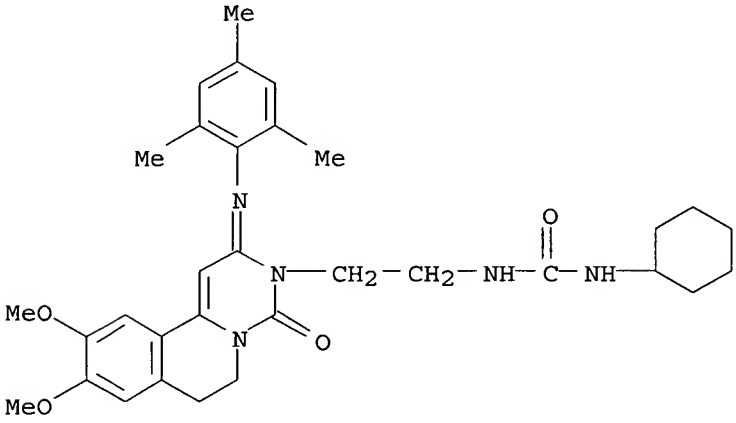
RN 298680-31-6 USPATFULL
CN Guanidine, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-(9CI) (CA INDEX NAME)



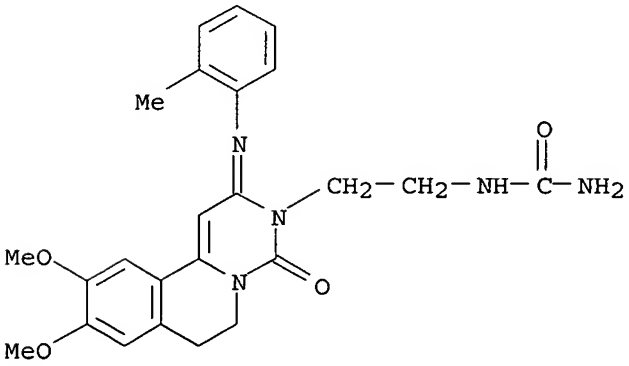
RN 298680-32-7 USPATFULL
CN Guanidine, N-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N'-nitro- (9CI) (CA INDEX NAME)



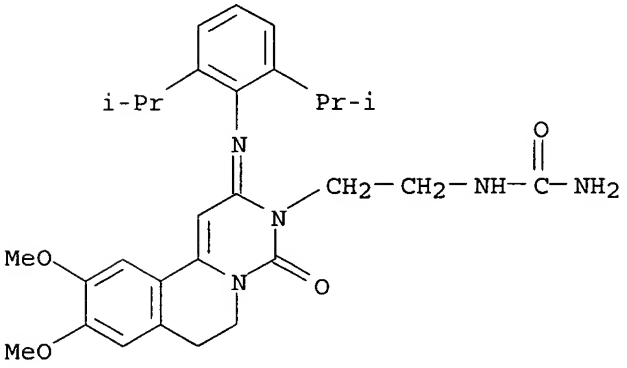
RN 298680-33-8 USPATFULL
CN Urea, N-cyclohexyl-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



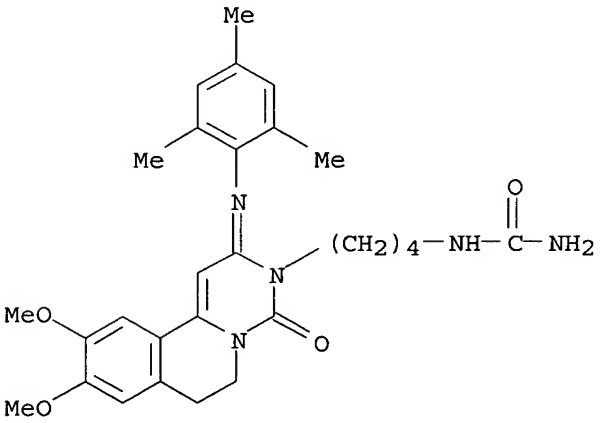
RN 298680-34-9 USPATFULL
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-2-[(2-methylphenyl)imino]-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



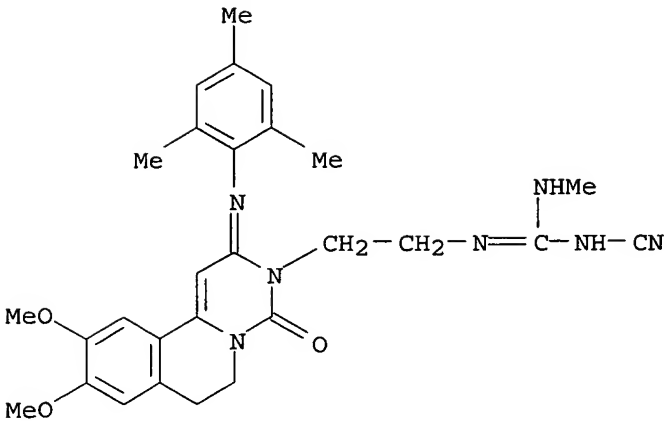
RN 298680-35-0 USPATFULL
CN Urea, [2-[2-[[2,6-bis(1-methylethyl)phenyl]imino]-6,7-dihydro-9,10-dimethoxy-4-oxo-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)



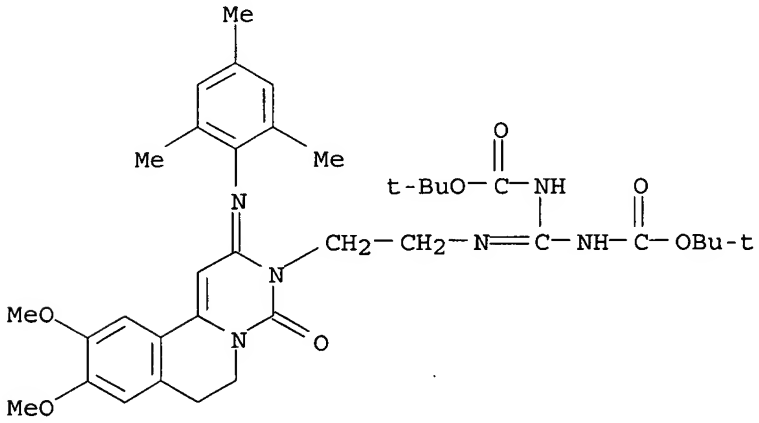
RN 298680-36-1 USPATFULL
CN Urea, [4-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]butyl]- (9CI) (CA INDEX NAME)



RN 298680-37-2 USPATFULL
CN Guanidine, N-cyano-N'-[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]-N''-methyl- (9CI) (CA INDEX NAME)



IT **298680-40-7P**
(preparation of 2-aryliminopyrimido[6,1-a]isoquinolin-4-ones as phosphodiesterase inhibitors)
RN 298680-40-7 USPATFULL
CN Carbamic acid, [[2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]carbonimidoyl]bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



L11 ANSWER 6 OF 6 USPATFULL on STN
ACCESSION NUMBER: 2003:334755 USPATFULL
TITLE: Combination treatment for depression and anxiety
INVENTOR(S): Sobolov-Jaynes, Susan B., Ivoryton, CT, UNITED STATES
Schmidt, Christopher J., Old Lyme, CT, UNITED STATES
PATENT ASSIGNEE(S): Pfizer Inc. (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003235631	A1	20031225	
APPLICATION INFO.:	US 2003-387060	A1	20030312	(10)

	NUMBER	DATE

PRIORITY INFORMATION: US 2002-389181P 20020617 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PFIZER INC, 150 EAST 42ND STREET, 5TH FLOOR - STOP 49, NEW YORK, NY, 10017-5612
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 1308
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method of treating depression or anxiety in a mammal, including a human, by administering to the mammal a PDE IV inhibitor in combination with an antidepressant or an anxiolytic agent. It also relates to pharmaceutical compositions containing a pharmaceutically acceptable carrier, a PDE IV inhibitor and an anxiolytic agent or antidepressant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **298680-25-8**
(treatment for depression and anxiety by combination of a PDE IV inhibitor and an antidepressant or an anxiolytic agent)
RN 298680-25-8 USPATFULL
CN Urea, [2-[6,7-dihydro-9,10-dimethoxy-4-oxo-2-[(2,4,6-trimethylphenyl)imino]-2H-pyrimido[6,1-a]isoquinolin-3(4H)-yl]ethyl]- (9CI) (CA INDEX NAME)